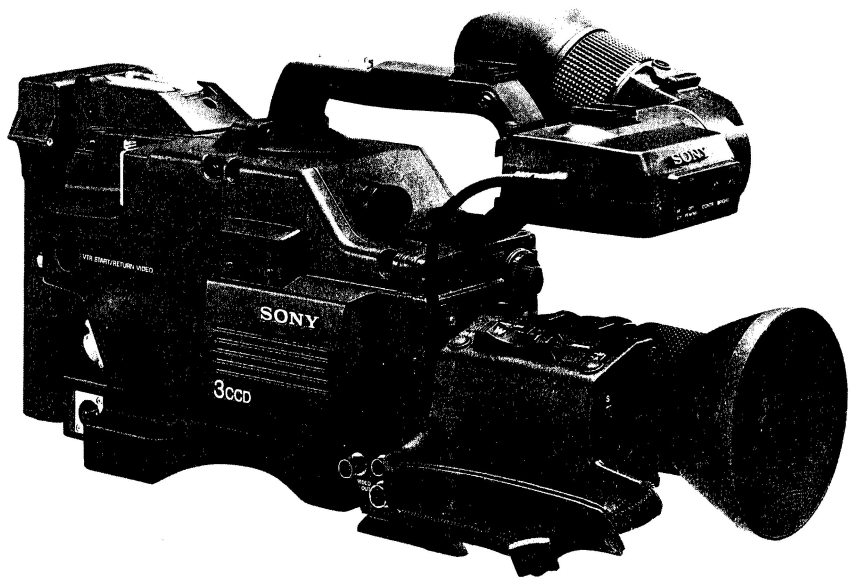
COLOR VIDEO CAMERA
CAMERA ADAPTOR
1.5INCH ELECTRONIC VIEWFINDER
ZOOM LENS

DXC-327P
CA-327P
DXF-501P
VCL-712BX

VOL. 2

BLOCK DIAGRAMS
SEMICONDUCTORS
SCHEMATIC DIAGRAMS
BOARD ILLUSTRATIONS
SPARE PARTS



SONY®
SERVICE MANUAL

SAFETY RELATED COMPONENT WARNING

Components identified by shading and ⚠ marked on the schematic diagrams and parts list are critical to safe operation. Replace these components with SONY parts whose part numbers appear as shown in this manual or in supplements published by SONY.

Warning—This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

The shielded interface cable recommended in this manual must be used with this equipment in order to comply with the limits for a computing device pursuant to Subpart J of Part 15 of FCC rules.

For the customers in Canada

This apparatus complies with the Class A limits for radio noise emissions set out in Radio Interference Regulations.

Pour les utilisateurs au Canada

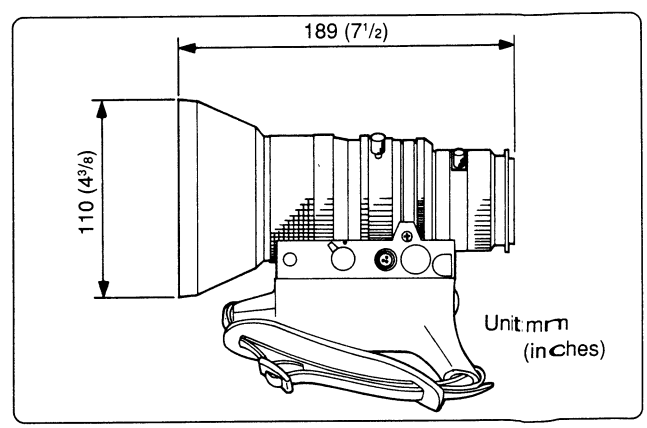
Cet appareil est conforme aux normes Classe A pour bruits radioélectriques, spécifiés dans le Règlement sur le brouillage radioélectrique.

ZOOM LENS

SPECIFICATIONS

Focal length	7.5 to 90 mm
Zoom	Manual and motorized, selectable
	Zooming ratio: 12 ×
Maximum aperture ratio	
	1.4
Iris control	Manual and auto, selectable
	1.4 to 16 and C (closed)
Range of object field (at the distance of 1.1 m)	
	W (wide angle): 660 × 880
	(24 1/2 × 34 3/4 inches)
	T (telephoto): 55 × 73 mm
	T (telephoto): (2 1/4 × 3 inches)
Minimum object distance	
	1.1 m
Filter thread	72 mm dia., 0.75 pitch
Mount	Bayonet mount, 1/2 inch
Weight	About 1.2 kg (2 lb 4 oz) with lens hood
Supplied accesory	
	Operating instructions (1)

Dimensions

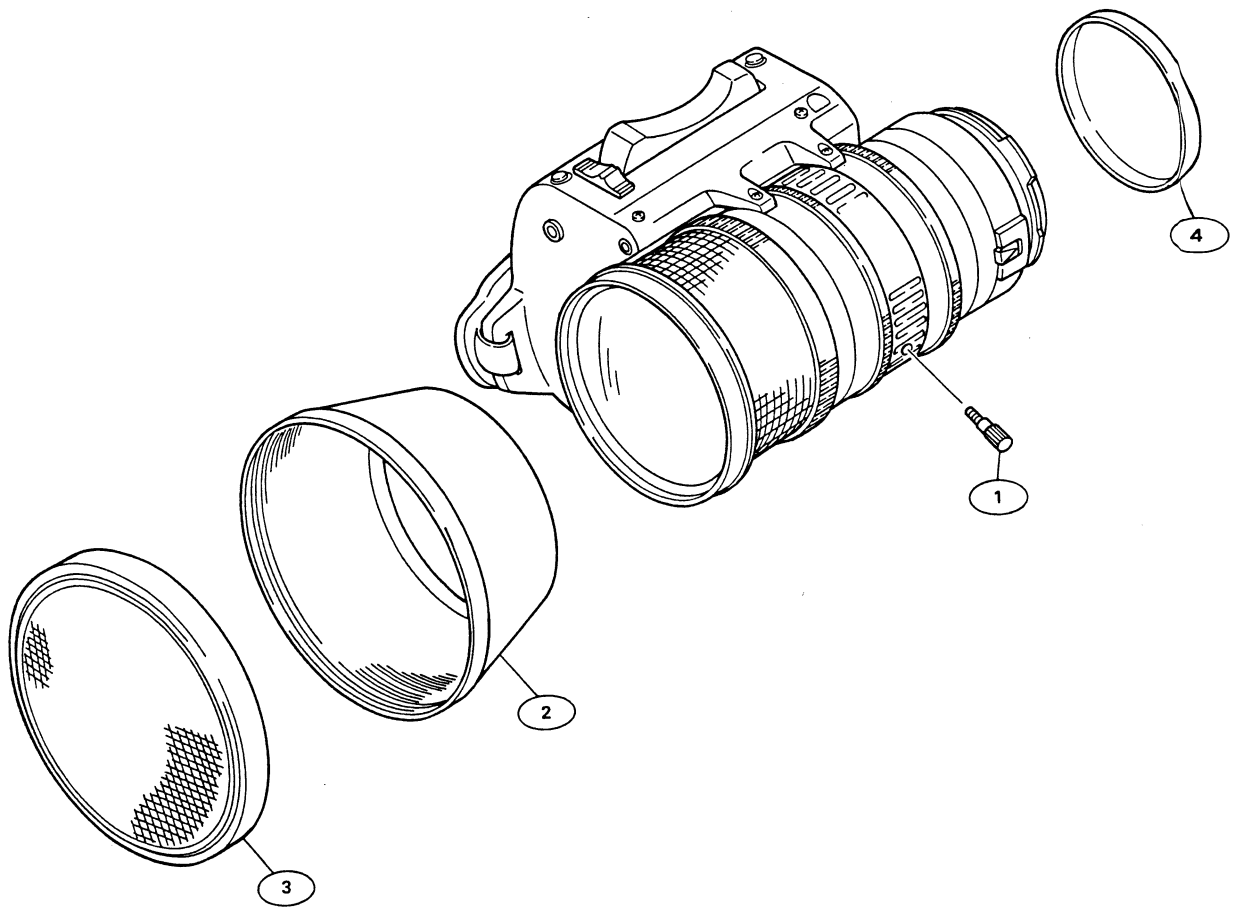


Design and specifications are subject to change without notice.

SONY®

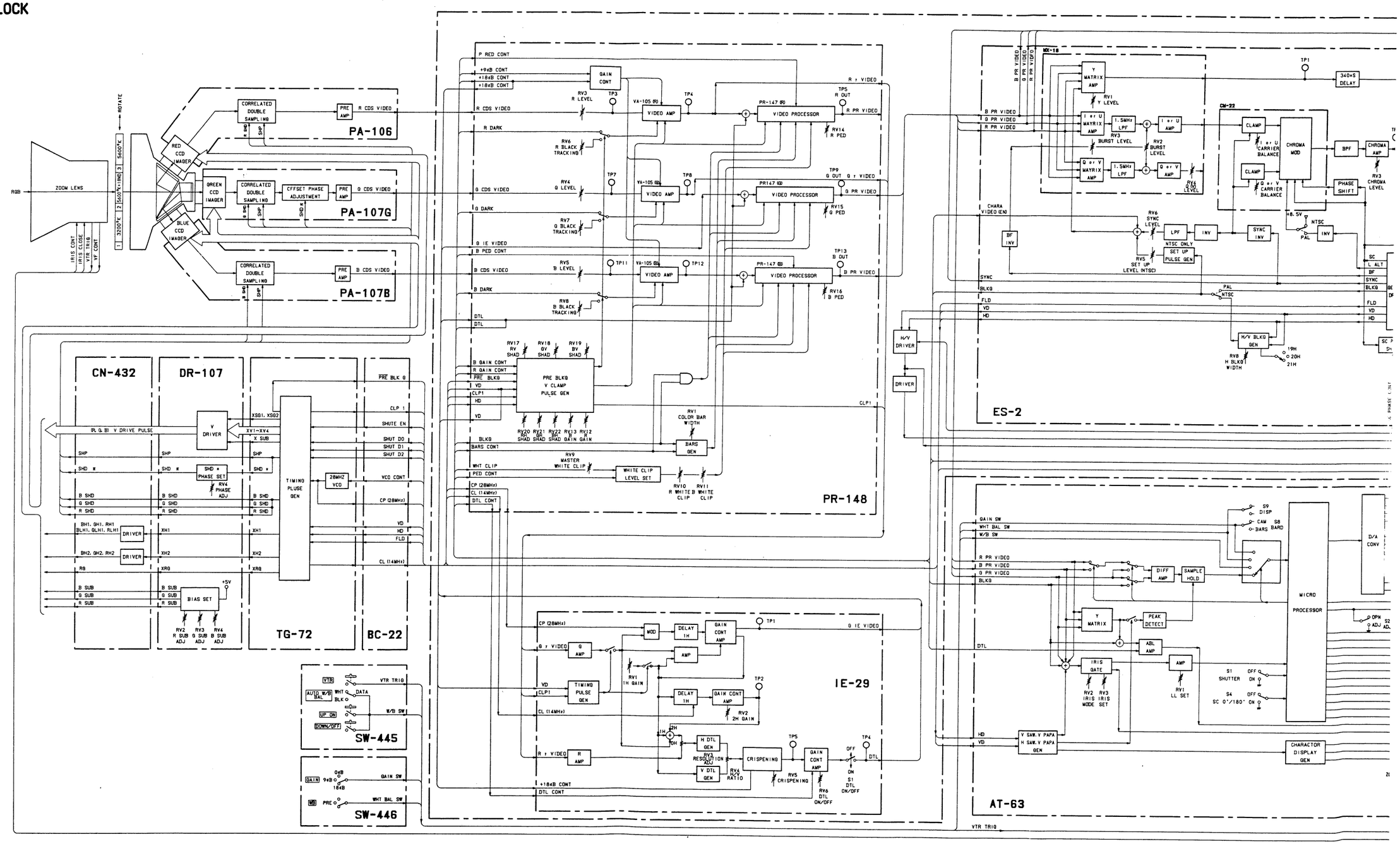
SERVICE MANUAL

No.	Part No.	SP	Description
1	3-707-247-01	o	LEVER, ZOOM
2	3-708-108-01	o	HOOD
3	3-708-109-01	o	CAP, HOOD
4	3-708-110-01	o	CAP, DUST



SECTION A
BLOCK DIAGRAMS

OVERALL BLOCK

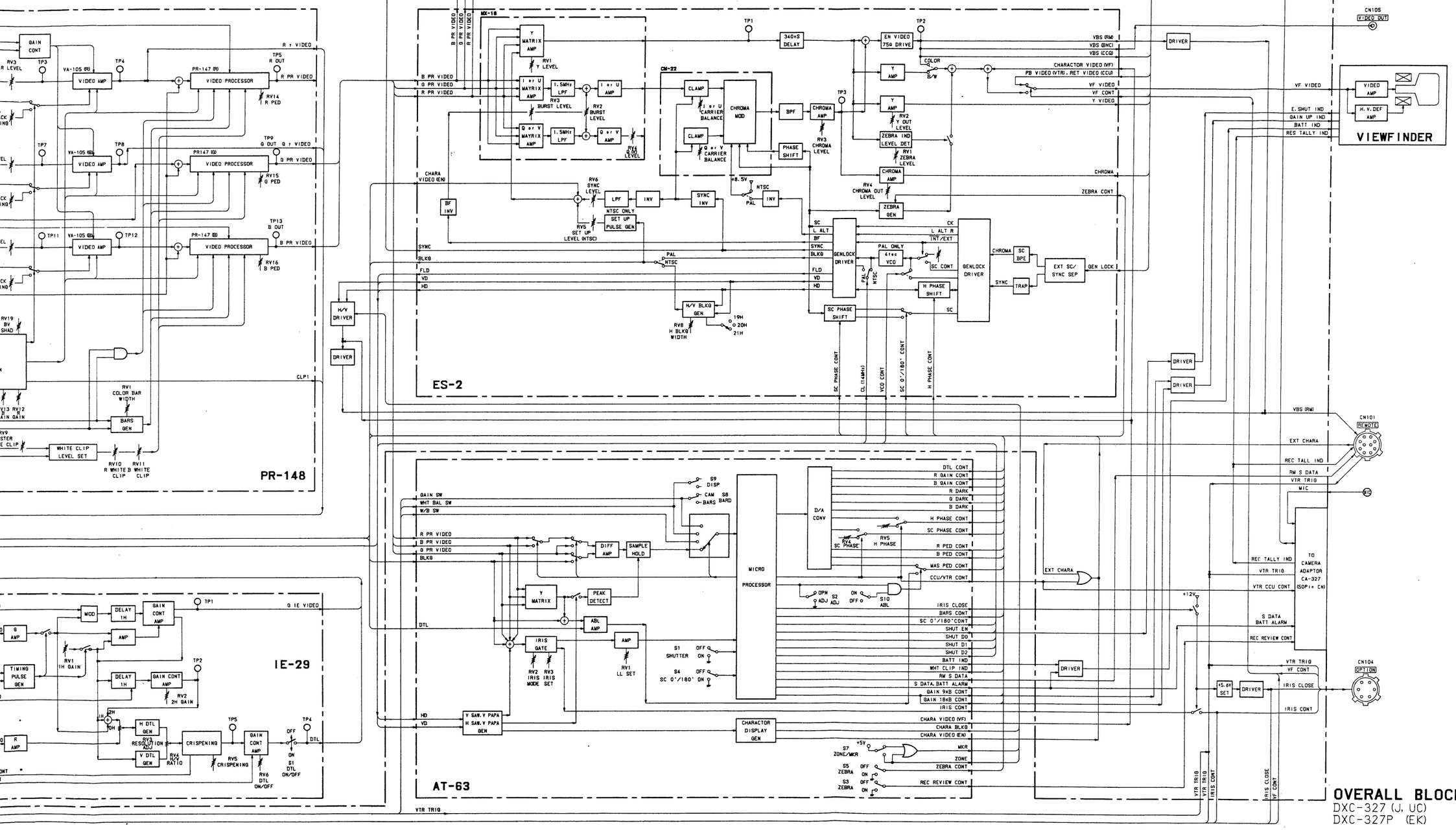


DXC-327 (J, UC)
DXC-327P (EK)

A-1 A-2

A | B | C | D | E | F | G

OVERALL BLOCK



OVERALL BLOCK

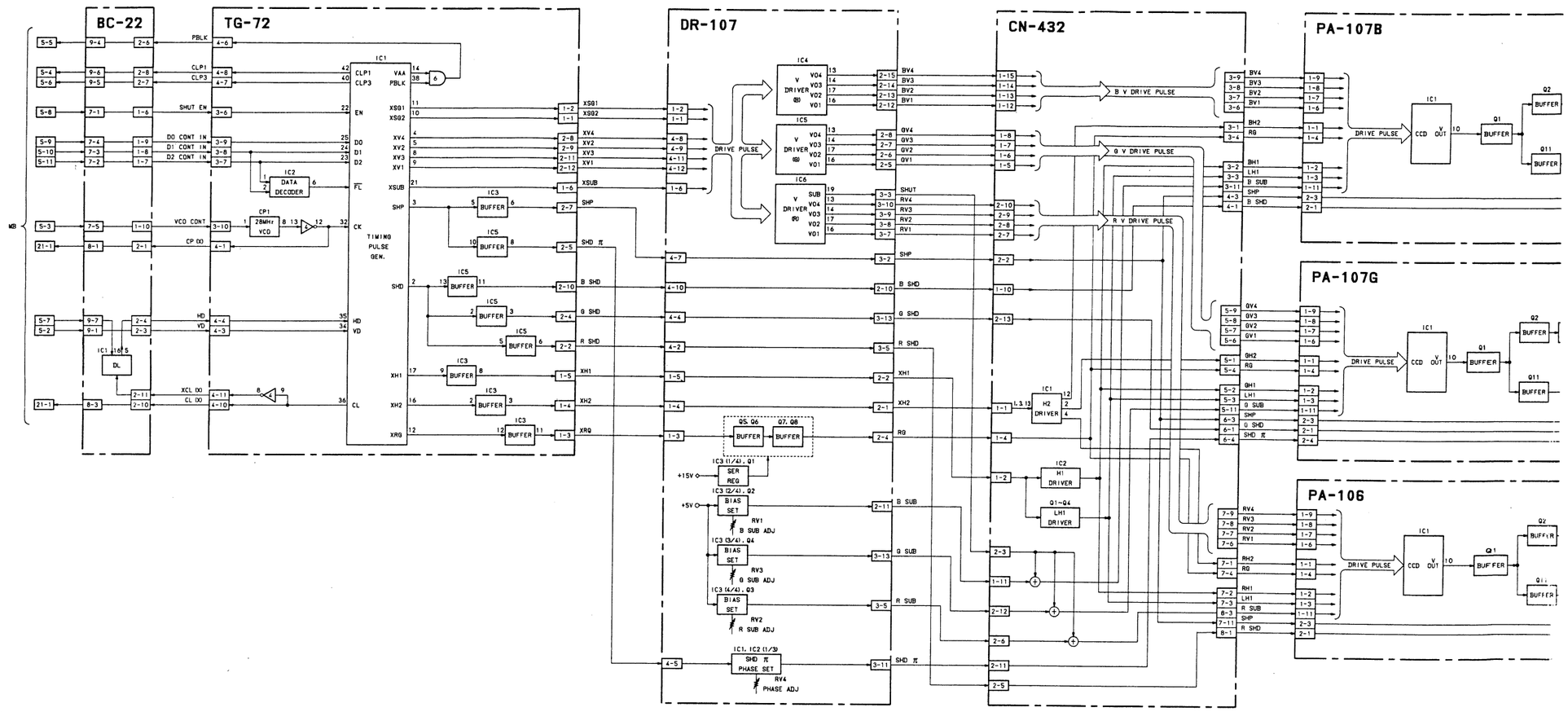
DXC-327 (J, UC)
DXC-327P (EK)

B-DXC327-OVERALLBLOCK/M

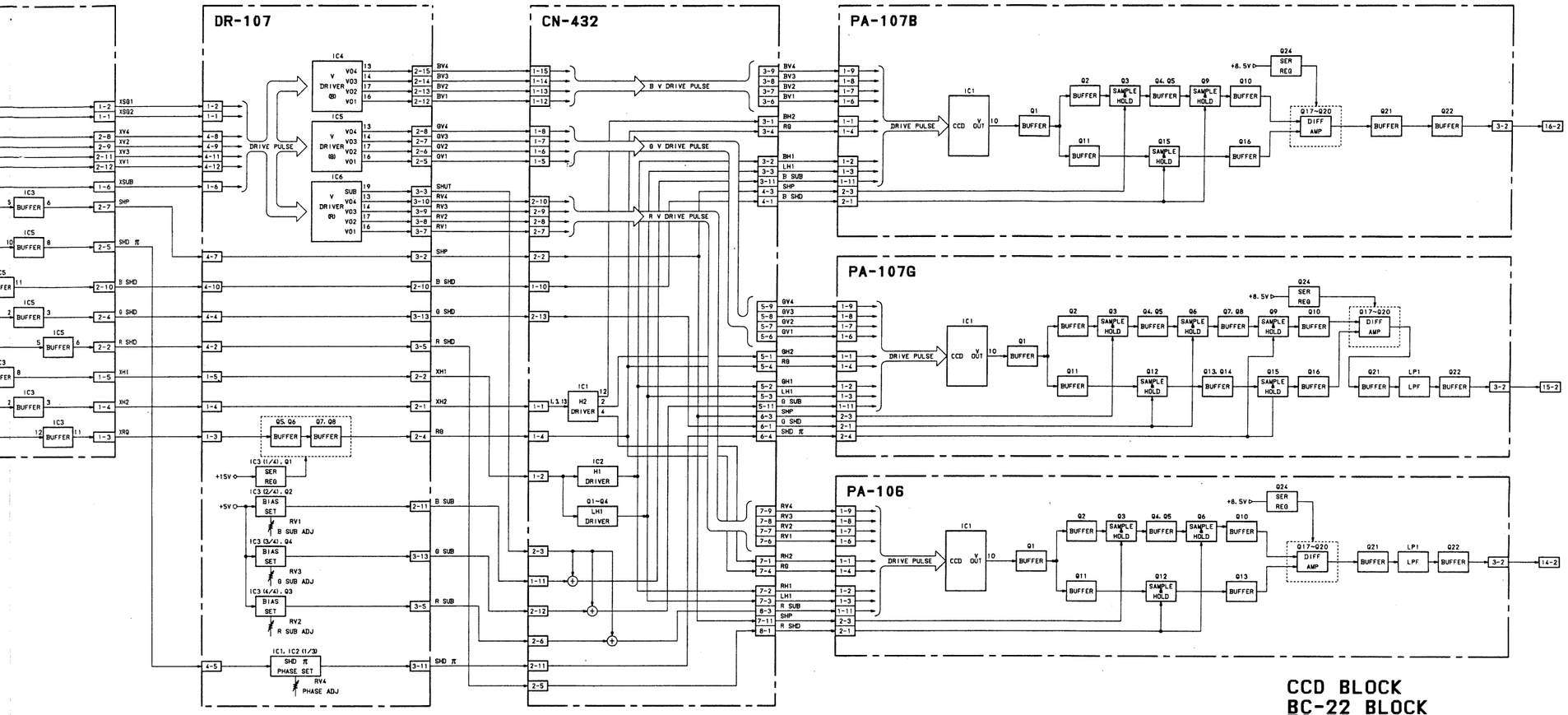
CCD BLOCK

CCD BLOCK

CCD BL



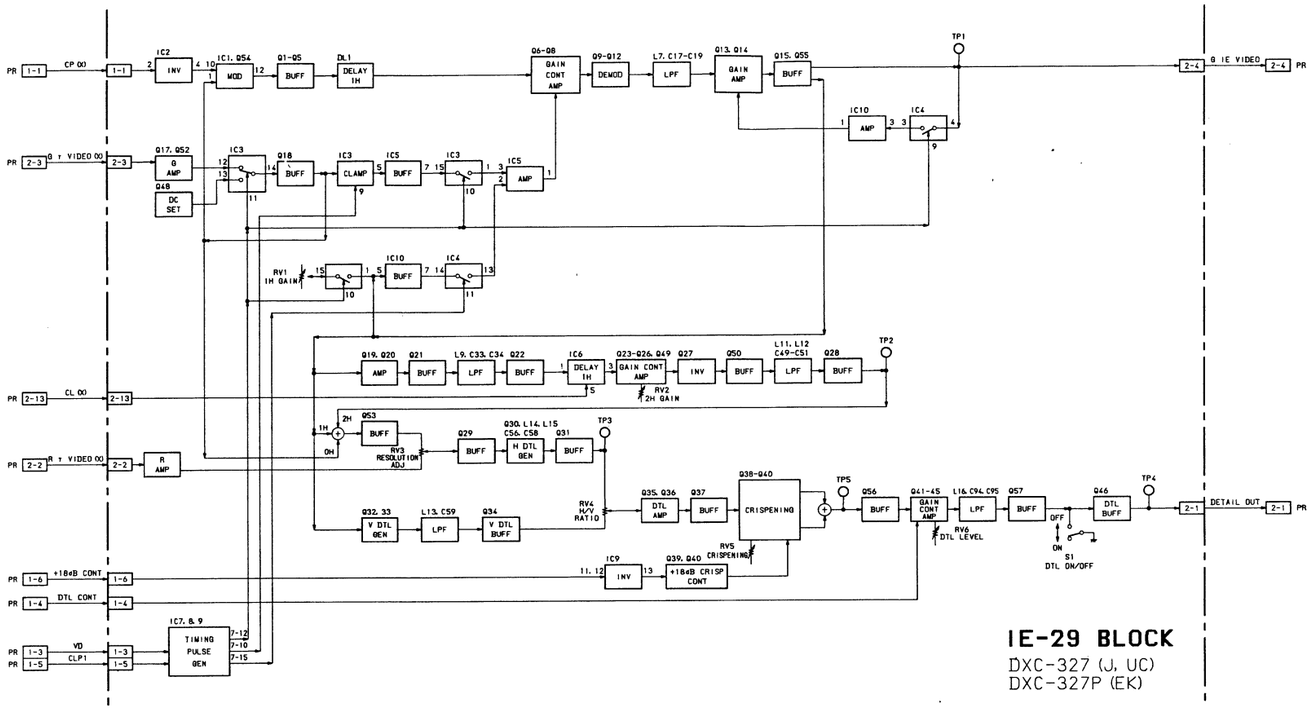
CCD BLOCK ≡ CCD BLOCK



CCD BLOCK
BC-22 BLOCK
TG-72 BLOCK
DR-107 BLOCK
CN-432 BLOCK
PR-107B/107G/106 BLOCK

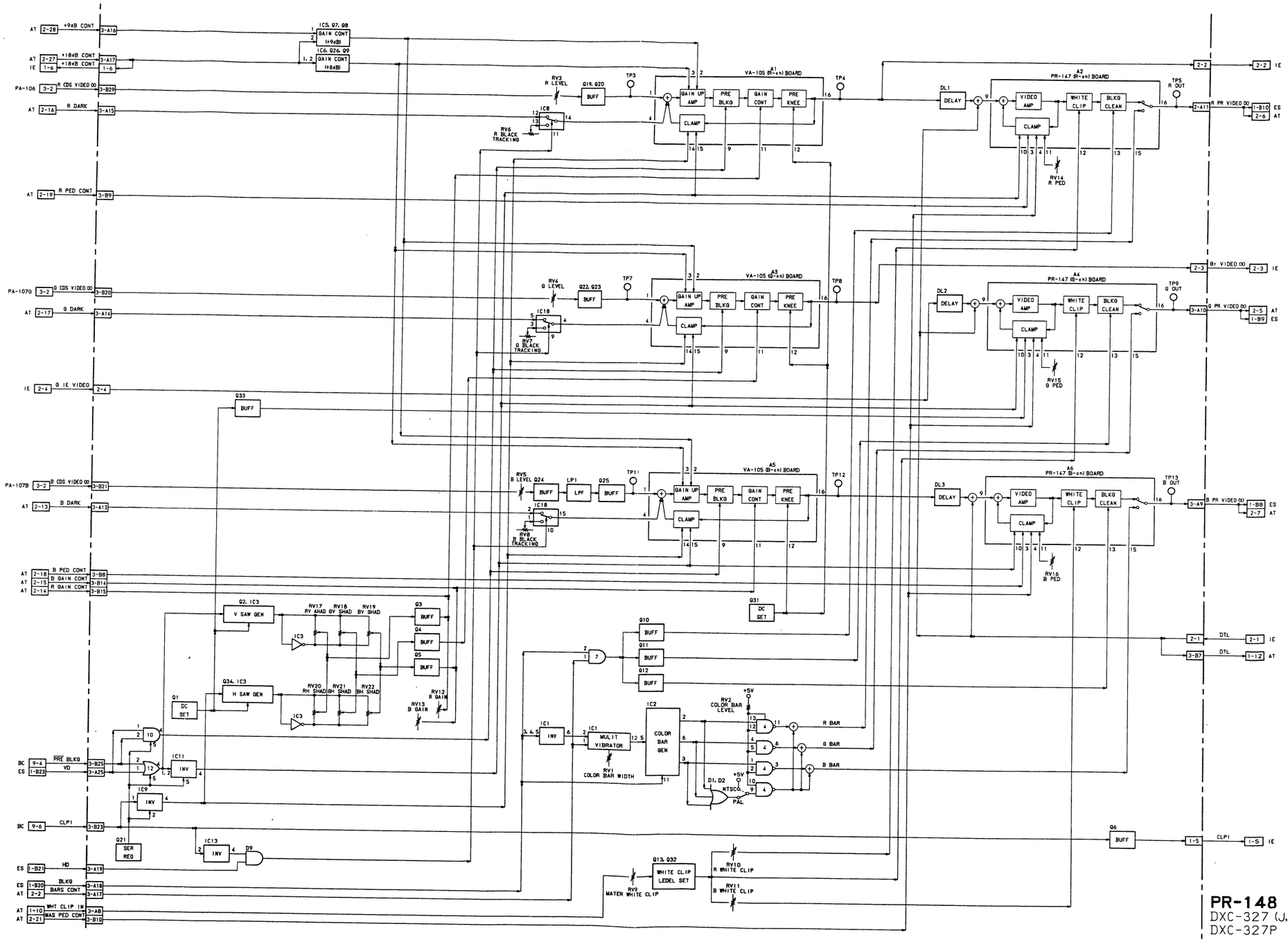
DXC-327 (J, UC)
DXC-327P (EK)

IE-29 BLOCK

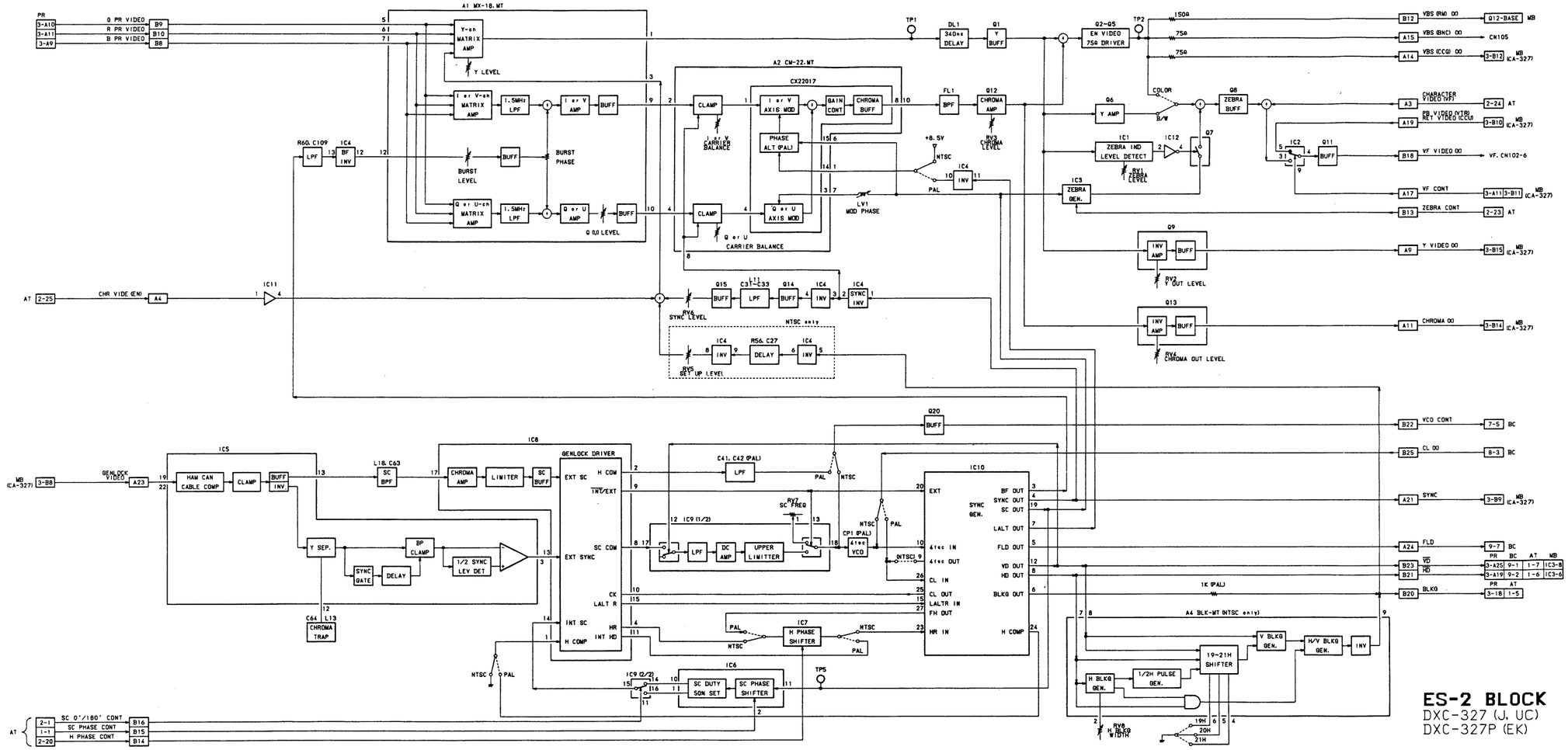


IE-29 BLOCK
DXC-327 (J, UC)
DXC-327P (EK)

PR-148 BLOCK

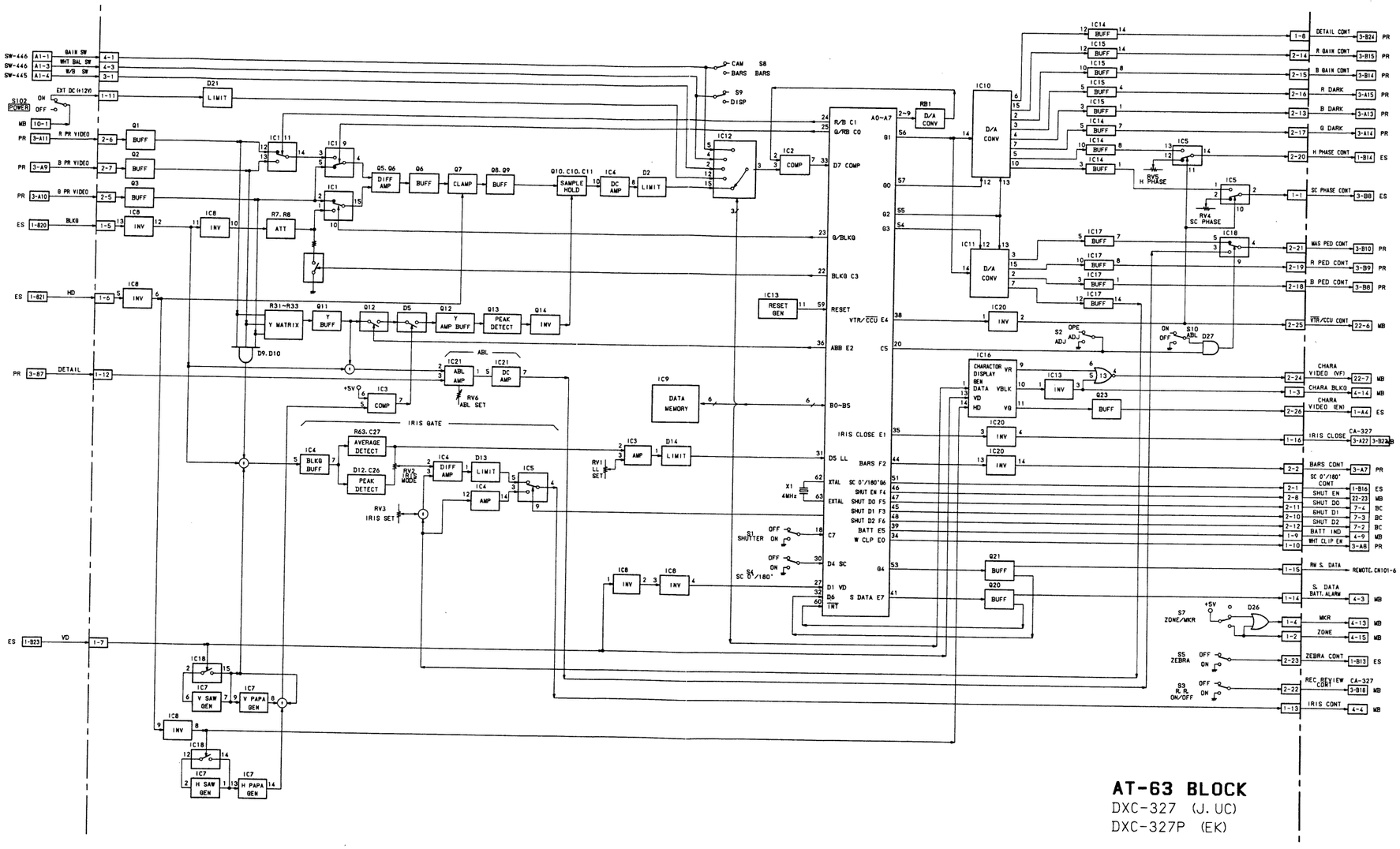

AT 2-28 +9dB CONT 3-A16
AT 2-27 +18dB CONT 3-A17
IE 1-6 +18dB CONT 1-6
PA-106 3-2 R CDS VIDEO 00 3-B29
AT 2-16 R DARK 3-A15
AT 2-19 R PED CONT 3-B9
PA-107G 3-2 G CDS VIDEO 00 3-B20
AT 2-17 G DARK 3-A14
IE 2-4 G IE VIDEO 2-4
PA-107B 3-2 B CDS VIDEO 00 3-B21
AT 2-13 B DARK 3-A13
AT 2-18 B PED CONT 3-B8
AT 2-15 B GAIN CONT 3-B14
AT 2-14 R GAIN CONT 3-B15
BC 9-4 PRE BLKG 3-B25
ES 1-B23 VD 3-A25
BC 9-6 CLP1 3-B23
ES 1-B21 HD 3-A19
ES 1-B20 BLKG 3-A18
AT 2-2 BARS CONT 3-A17
AT 1-10 WHT CLIP IN 3-A8
AT 2-21 MAS PED CONT 3-B10
IC5, Q7, Q8 GAIN CONT (+9dB)
IC6, Q26, Q9 GAIN CONT (+18dB)
RV3 R LEVEL
RV4 G LEVEL
RV5 B LEVEL
Q19, Q20 BUFF
Q22, Q23 BUFF
Q24 BUFF
LPF
Q25 BUFF
Q33 BUFF
IC8
IC18
RV6 R BLACK TRACKING
RV7 G BLACK TRACKING
RV8 B BLACK TRACKING
TP3
TP4
TP7
TP8
TP11
TP12
A1 VA-105 (R-ch) BOARD
A3 VA-105 (G-ch) BOARD
A5 VA-105 (B-ch) BOARD
GAIN UP AMP
PRE BLKG
GAIN CONT
PRE KNEE
CLAMP
A2 PR-147 (R-ch) BOARD
A4 PR-147 (G-ch) BOARD
A6 PR-147 (B-ch) BOARD
DL1 DELAY
DL2 DELAY
DL3 DELAY
VIDEO AMP
WHITE CLIP
BLKG CLEAN
TP5 R OUT
TP9 G OUT
TP13 B OUT
RV14 R PED
RV15 G PED
RV16 B PED
2-2 IE
R PR VIDEO 00
G PR VIDEO 00
B PR VIDEO 00
Q2, IC3 V SAW GEN
Q34, IC3 H SAW GEN
RV17 RV AMP
RV18 GV SHAD
RV19 BV SHAD
RV20 RH SHAD
RV21 GH SHAD
RV22 BH SHAD
RV12 R GAIN
RV13 B GAIN
Q1 DC SET
Q3 BUFF
Q4 BUFF
Q5 BUFF
Q10 BUFF
Q11 BUFF
Q12 BUFF
Q6 BUFF
Q31 DC SET
Q13, Q32 WHITE CLIP LEDEL SET
RV9 MATER WHITE CLIP
RV10 R WHITE CLIP
RV11 B WHITE CLIP
IC1 INV
IC1 MULIT VIBRATOR
RV1 COLOR BAR WIDTH
IC2 COLOR BAR GEN
RV2 COLOR BAR LEVEL
+5V
R BAR
G BAR
B BAR
D1, D2 NTSC/PAL
IC10 INV
IC11 INV
IC9 INV
IC13 INV
Q21 SER REG
D9
DTL
CLP1
PR-148 BLOCK
DXC-327 (J, UC)
DXC-327P (EK)

ES-2 BLOCK



ES-2 BLOCK
DXC-327 (J, UC)
DXC-327P (EK)

AT-63 BLOCK



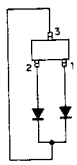
AT-63 BLOCK
DXC-327 (J. UC)
DXC-327P (EK)

SECTION B
SEMICONDUCTOR PIN ASSIGNMENTS

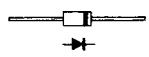
The circuit diagram of IC is obtained from the IC data book published by the manufacturer.

< DIODE >

TOP VIEW (SCALE 4/1)

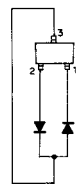


1S2837
DAN202K

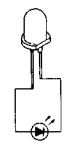


1SS133
1SS136
ERA15-06
ERA22-08

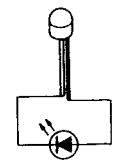
TOP VIEW (SCALE 4/1)



DA204K



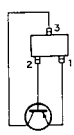
SLH-56VT



TLO102A
TLR109A

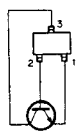
<TRANSISTOR >

TOP VIEW (SCALE 4/1)

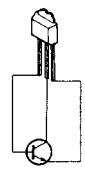


2SA812
2SB624

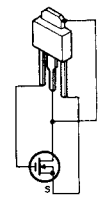
TOP VIEW (SCALE 4/1)



2SC2812
2SC2814
2SC3722K



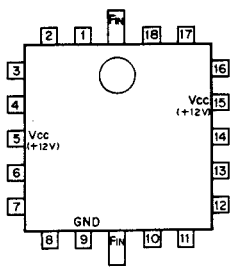
2SD1220

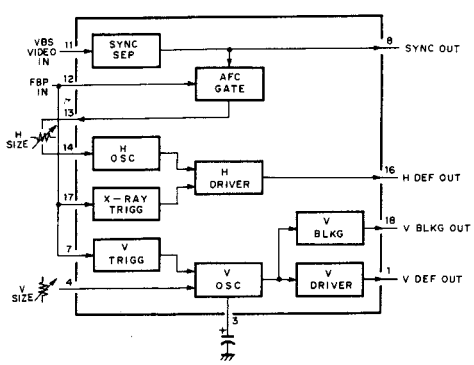


2SK612

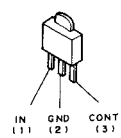
< IC >

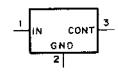
HA11423MP (HITACHI) FLAT PACKAGE
TV H/V SYNC SIGNAL PROCESSOR
– TOP VIEW –



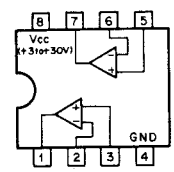


M5236ML (MITSUBISI)
ADJUSTABLE VOLTAGE REGULATOR

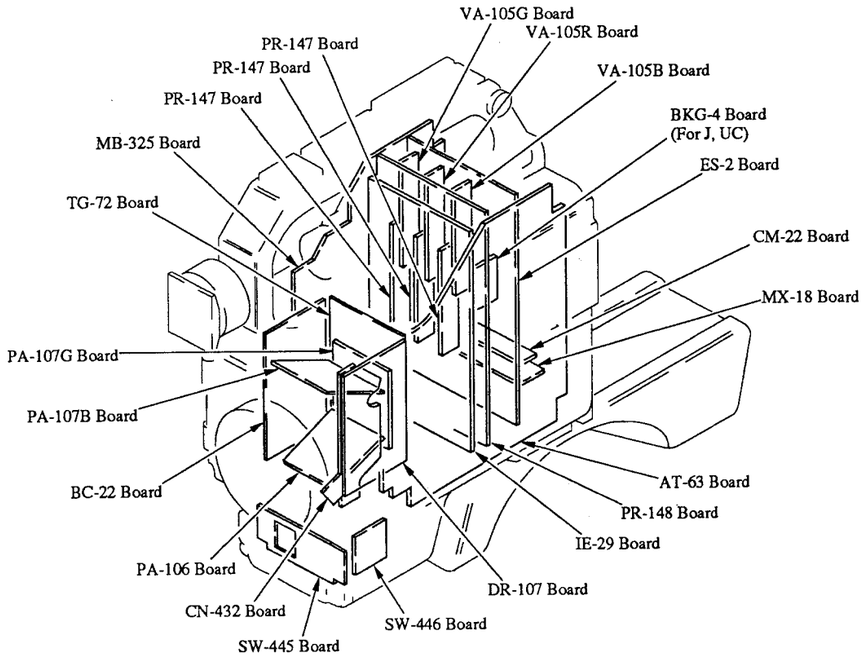




uPC358G2 (NEC) FLAT PACKAGE
DUAL OPERATIONAL AMPLIFIERS
– TOP VIEW –

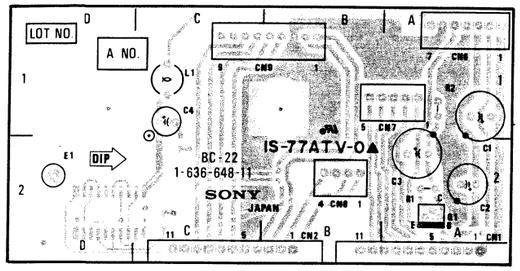


SECTION C
SCHEMATIC DIAGRAMS AND BOARD ILLUSTRATIONS

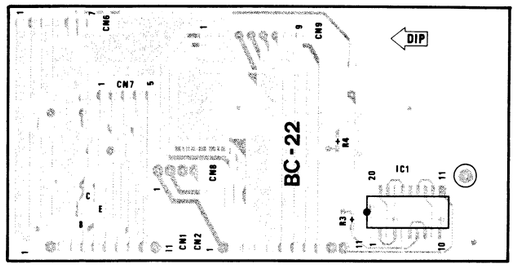


CCD BLOCK (1/2) BC-22
TG-72, DR-107

BC-22 BOARD



1-636-648-11 COMPONENT SIDE

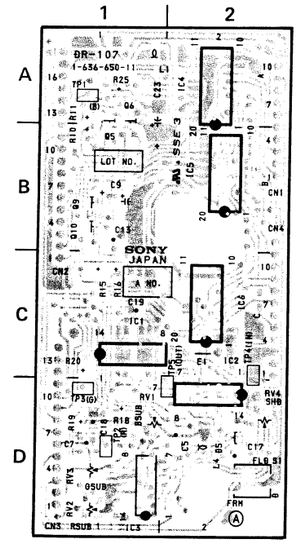


1-636-654-11 SOLDERING SIDE

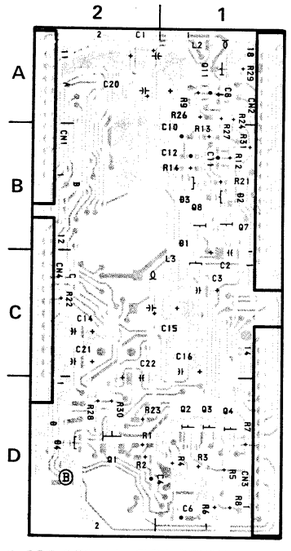
TG-72 BOARD

TG-72 (1-636-652-11)

CN1	A-1
CN2	C-1
CN3	A-2
CN4	C-2
CP1	A-2
IC1	B-2
IC2	A-1
IC3	B-1
IC4	C-1
IC5	B-2
IC6	C-2



1-636-650-11 COMPONENT SIDE

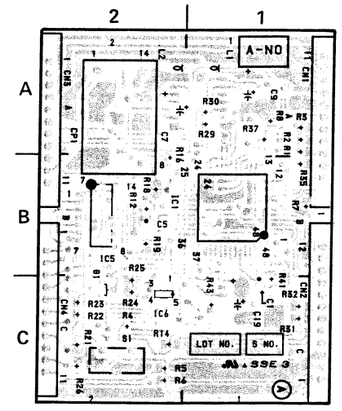


1-636-650-11 SOLDERING SIDE

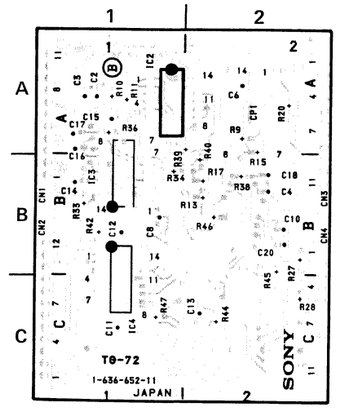
DR-107 BOARD

DR-107 (1-636-650-11)

CN1	B-2
CN2	A-1
CN3	D-1
CN4	C-2
D1	B-1
D2	B-1
D4	D-2
D5	D-2
IC1	C-1
IC2	C-2
IC3	D-1
IC4	A-2
IC5	B-2
IC6	C-2
Q1	D-2
Q2	D-1
Q3	D-1
Q4	D-1
Q5	B-1
Q6	A-1
Q7	B-1
Q8	B-1
Q9	B-1
Q10	B-1
Q11	A-1
RV1	D-1
RV2	D-1
RV3	D-1
RV4	D-2
S1	D-2
TP1	A-1
TP2	D-1
TP3	D-1
TP4	C-2
TP5	C-2



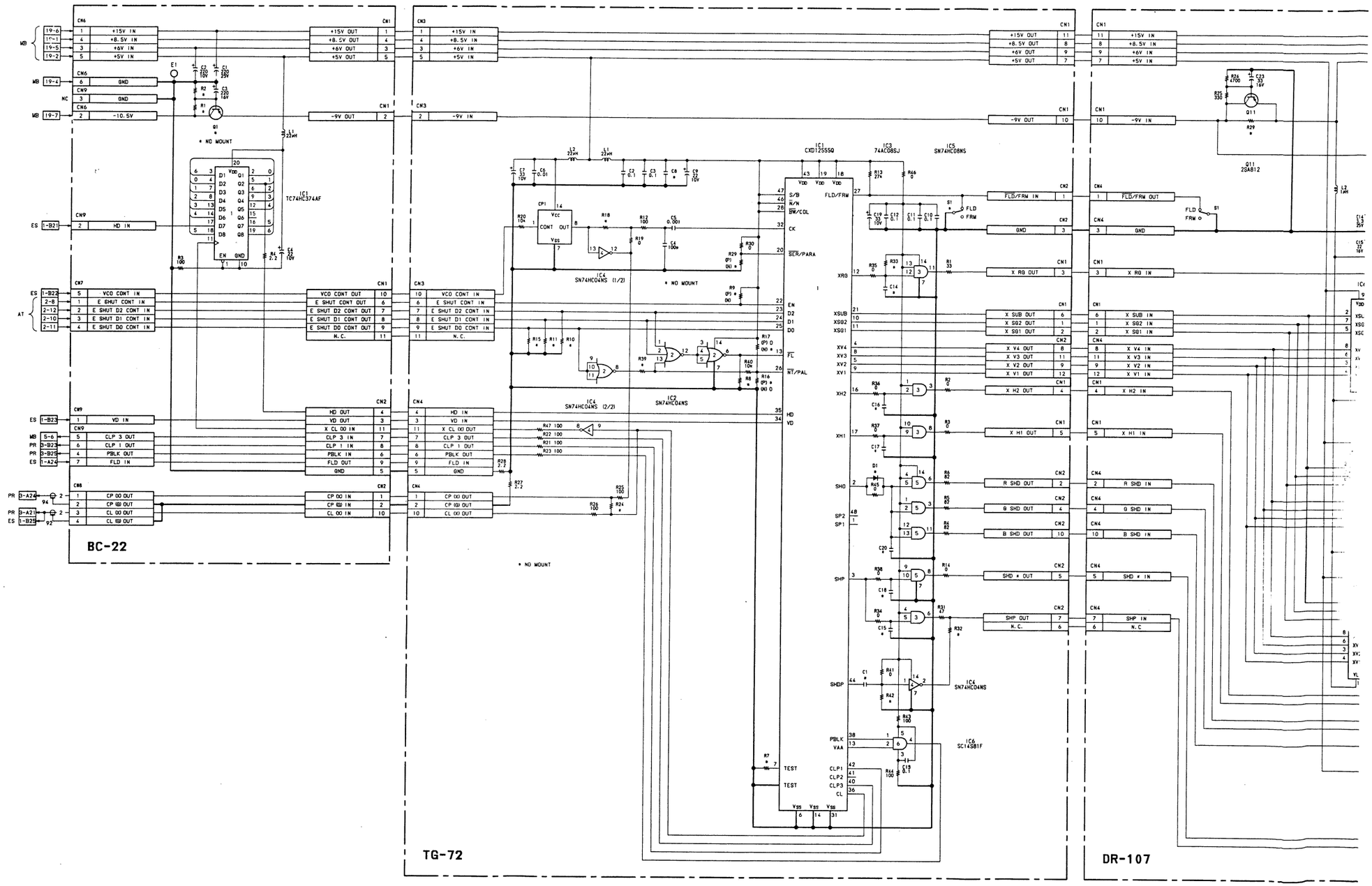
1-636-652-11 COMPONENT SIDE

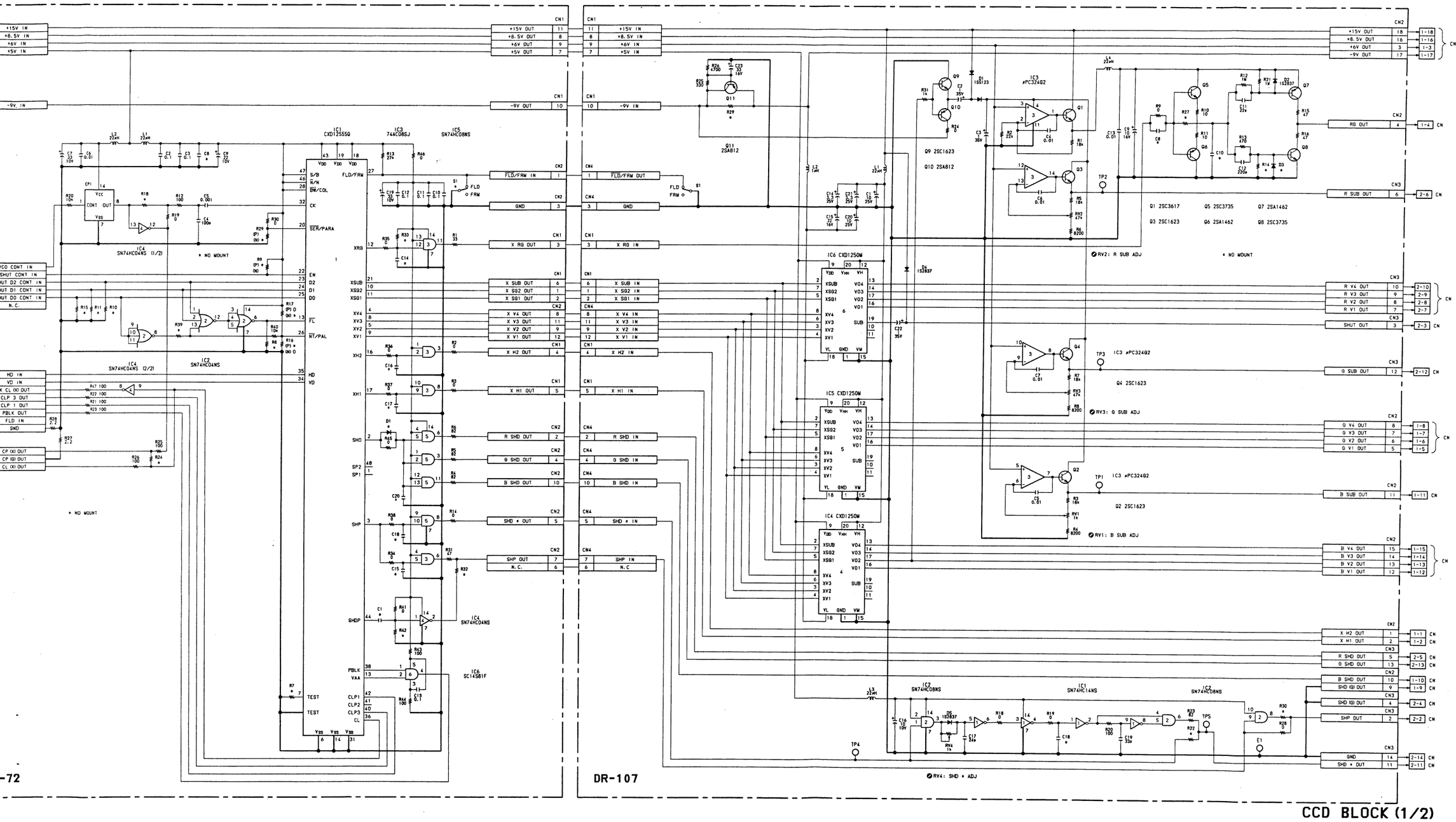


1-636-652-11 SOLDERING SIDE

CCD BLOCK (1/2)

BC-22 BOARD
TG-72 BOARD
DR-107 BOARD





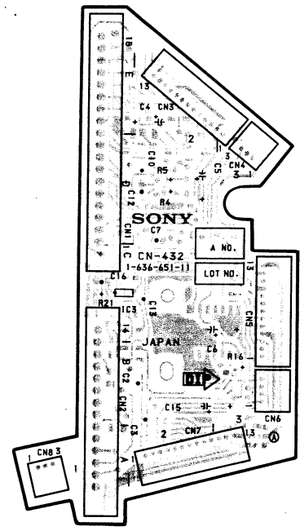
CCD BLOCK (1/2)

BC-22 BOARD
TG-72 BOARD
DR-107 BOARD

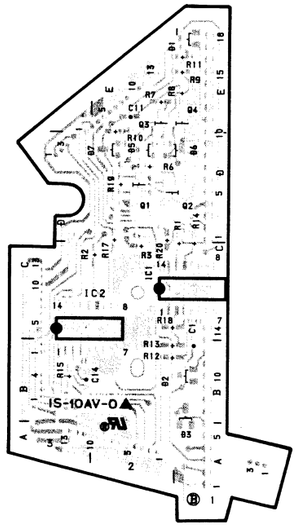
DXC-327 (J, UC)
DXC-327P (EK)

B-DXC327-CCDBLOCK/M#1

CN-432 BOARD

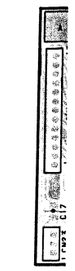


1-636-651-11 COMPONENT SIDE



1-636-651-11 SOLDERING SIDE

PA-



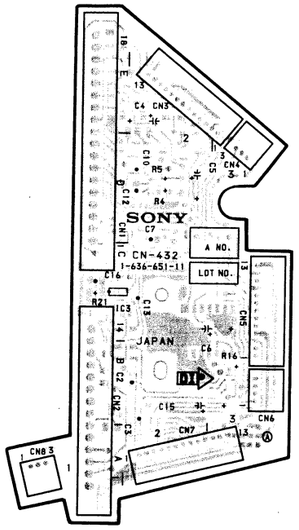
1-636-6

PA-

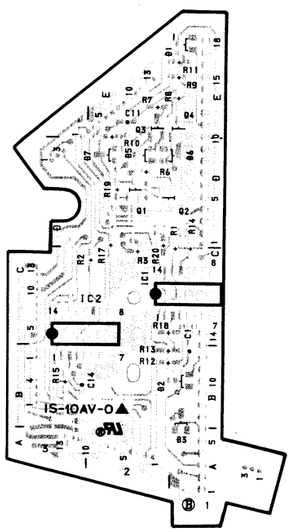
1-636-6

CCD BLOCK (2/2) CN-432, PA-106
PA-107G, PA-107B

CN-432 BOARD

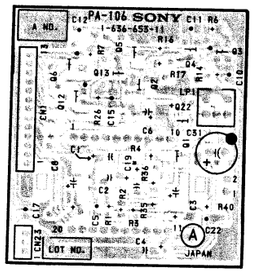


1-636-651-11 COMPONENT SIDE

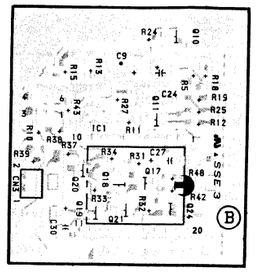


1-636-651-11 SOLDERING SIDE

PA-106 BOARD

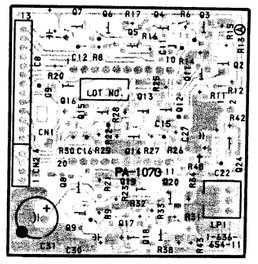


1-636-653-11 COMPONENT SIDE

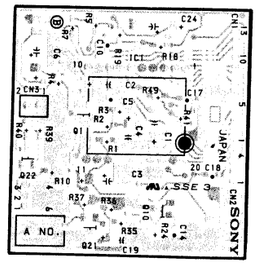


1-636-653-11 SOLDERING SIDE

PA-107G BOARD

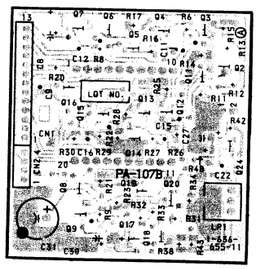


1-636-654-11, 12 COMPONENT SIDE

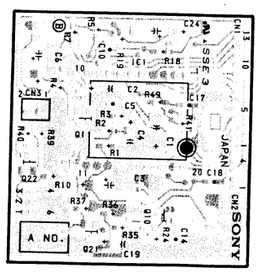


1-636-654-11, 12 SOLDERING SIDE

PA-107B BOARD



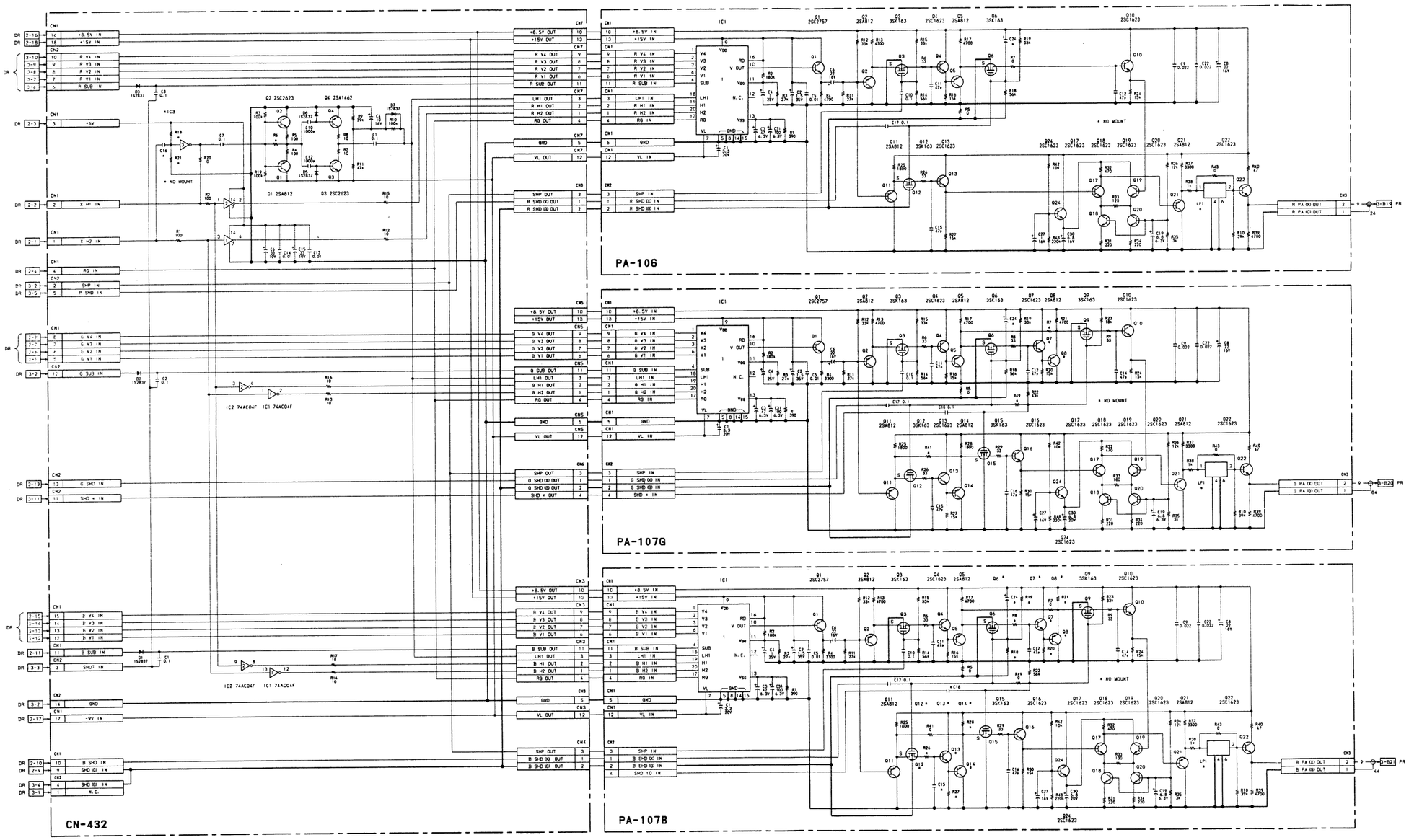
1-636-655-11, 12 COMPONENT SIDE



1-636-655-11, 12 SOLDERING SIDE

CCD BLOCK (2/2)

CN-432 BOARD
PA-106 BOARD
PA-107G BOARD
PA-107B BOARD

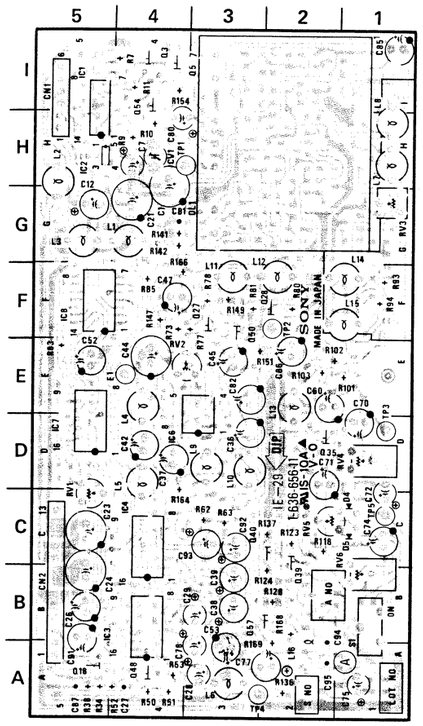


CCD BLOCK (2/2)
CN-432 BOARD
PA-107G BOARD
PA-106 BOARD
PA-107B BOARD
DXC-327 (J, UC)
DXC-327P (EK)

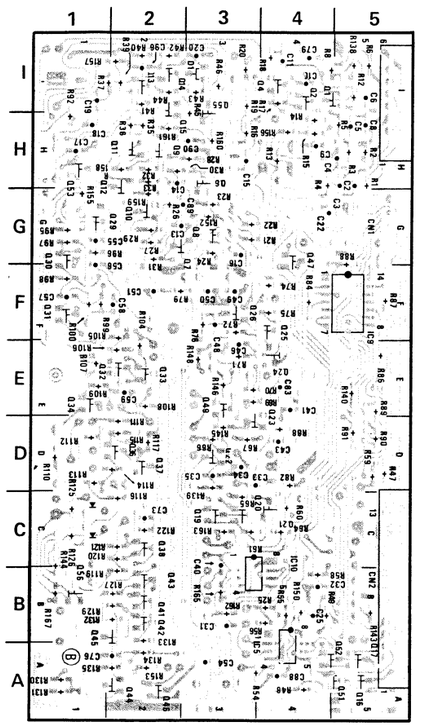
IE-29 BOARD

IE-29 (1-636-656-11)

CN1	G-5
CN2	B-5
DL1	G-3
D1	I-3
D4	C-1
D5	C-1
E1	E-5
IC1	I-5
IC2	G-5
IC3	B-5
IC4	C-4
IC5	A-4
IC6	D-4
IC7	D-5
IC8	F-5
IC9	F-5
IC10	C-4
Q1	I-4
Q2	I-4
Q3	I-4
Q4	I-4
Q5	I-3
Q6	H-3
Q7	G-3
Q8	G-3
Q9	H-2
Q10	G-2
Q11	H-2
Q12	H-1
Q13	I-2
Q14	I-2
Q15	H-2
Q16	A-5
Q17	A-5
Q18	A-5
Q19	C-3
Q21	C-4
Q22	D-3
Q23	D-4
Q24	E-4
Q25	F-4
Q26	F-3
Q27	F-3
Q28	F-2
Q29	G-2
Q30	G-1
Q31	F-1
Q32	E-1
Q33	E-2
Q34	E-1
Q35	D-2
Q36	D-2
Q37	D-2
Q38	C-2
Q39	B-2
Q40	C-3
Q41	B-2
Q42	B-2
Q43	B-2
Q44	A-2
Q45	B-1
Q46	A-2
Q48	A-4
Q49	E-3
Q50	F-3
Q51	A-5
Q52	A-5
Q53	H-1
Q54	I-4
Q55	I-3
Q56	B-1
Q57	B-3
RV1	C-5
RV2	E-4
RV3	G-1
RV4	D-1
RV5	C-2
RV6	C-1
S1	B-1
TP1	G-4
TP2	F-2
TP3	E-1
TP4	A-3
TP5	C-1



1-636-656-11 COMPONENT SIDE



1-636-656-11 SOLDERING SIDE

IE-29 (1-636-656-11)

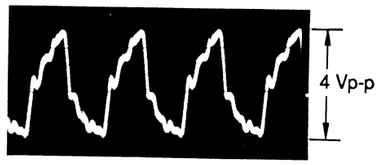
CN1	G-5
CN2	B-5
DL1	G-3
D1	I-3
D4	C-1
D5	C-1
E1	E-5
IC1	I-5
IC2	G-5
IC3	B-5
IC4	C-4
IC5	A-4
IC6	D-4
IC7	D-5
IC8	F-5
IC9	F-5
IC10	C-4
Q1	I-4
Q2	I-4
Q3	I-4
Q4	I-4
Q5	I-3
Q6	H-3
Q7	G-3
Q8	G-3
Q9	H-2
Q10	G-2
Q11	H-2
Q12	H-1
Q13	I-2
Q14	I-2
Q15	H-2
Q16	A-5
Q17	A-5
Q18	A-5
Q19	C-3
Q21	C-4
Q22	D-3
Q23	D-4
Q24	E-4
Q25	F-4
Q26	F-3
Q27	F-3
Q28	F-2
Q29	G-2
Q30	G-1
Q31	F-1
Q32	E-1
Q33	E-2
Q34	E-1
Q35	D-2
Q36	D-2
Q37	D-2
Q38	C-2
Q39	B-2
Q40	C-3
Q41	B-2
Q42	B-2
Q43	B-2
Q44	A-2
Q45	B-1
Q46	A-2
Q48	A-4
Q49	E-3
Q50	F-3
Q51	A-5
Q52	A-5
Q53	H-1
Q54	I-4
Q55	I-3
Q56	B-1
Q57	B-3
RV1	C-5
RV2	E-4
RV3	G-1
RV4	D-1
RV5	C-2
RV6	C-1
S1	B-1
TP1	G-4
TP2	F-2
TP3	E-1
TP4	A-3
TP5	C-1

IE-29 BOARD

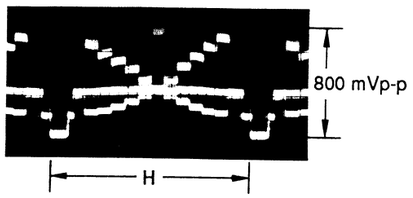
NOTE:

1. All voltage are DC, measured with a digital voltmeter.
2. All waveforms are taken and DC voltage is measured in condition below.
   - Shoot the grayscale chart. Adjust lens iris so that a white level is 100 IRE on the waveform monitor.
   - GAIN : 0 dB
   - WHITE BAL : PRE
   - ABL : OFF
   - SHUTTER : OFF
   - ZEBRA : OFF
   - VF MARKER : OFF
   - PHASE : 0°
   - BARS : OFF

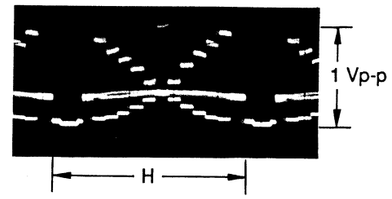
CN2-13 pin



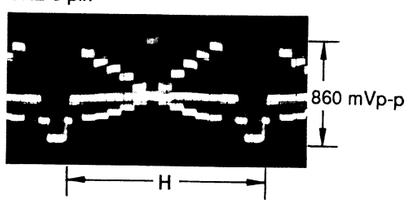
CN2-2 pin



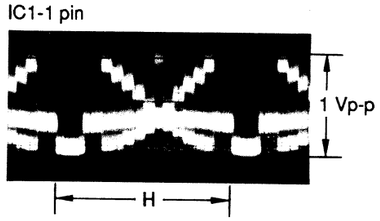
TP1



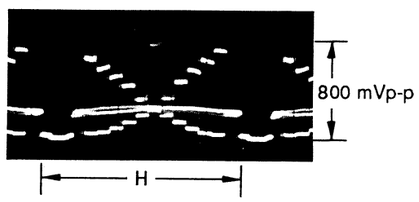
CN2-3 pin



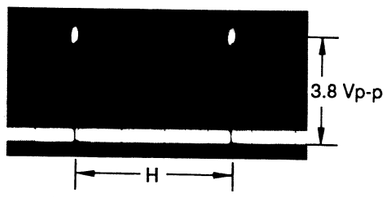
IC1-1 pin



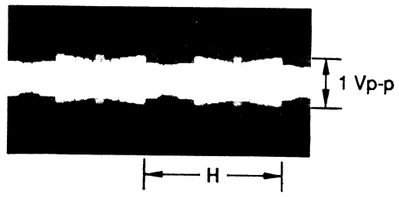
TP2



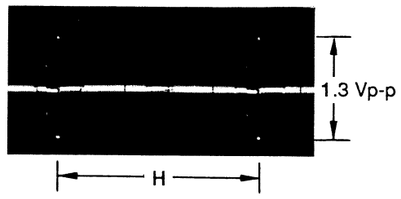
CN1-5 pin



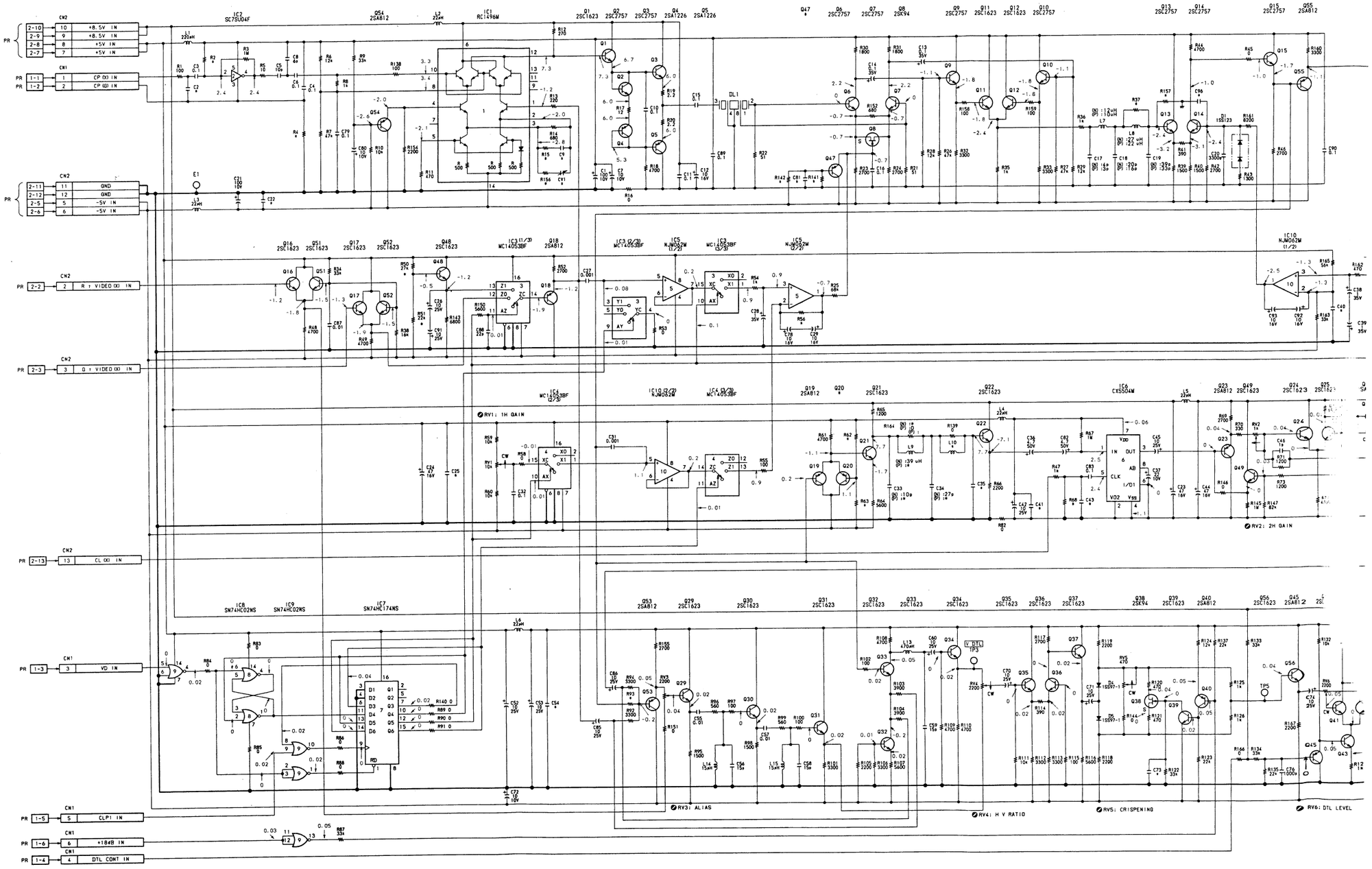
IC1-12 pin



TP4



IE-29 BOARD

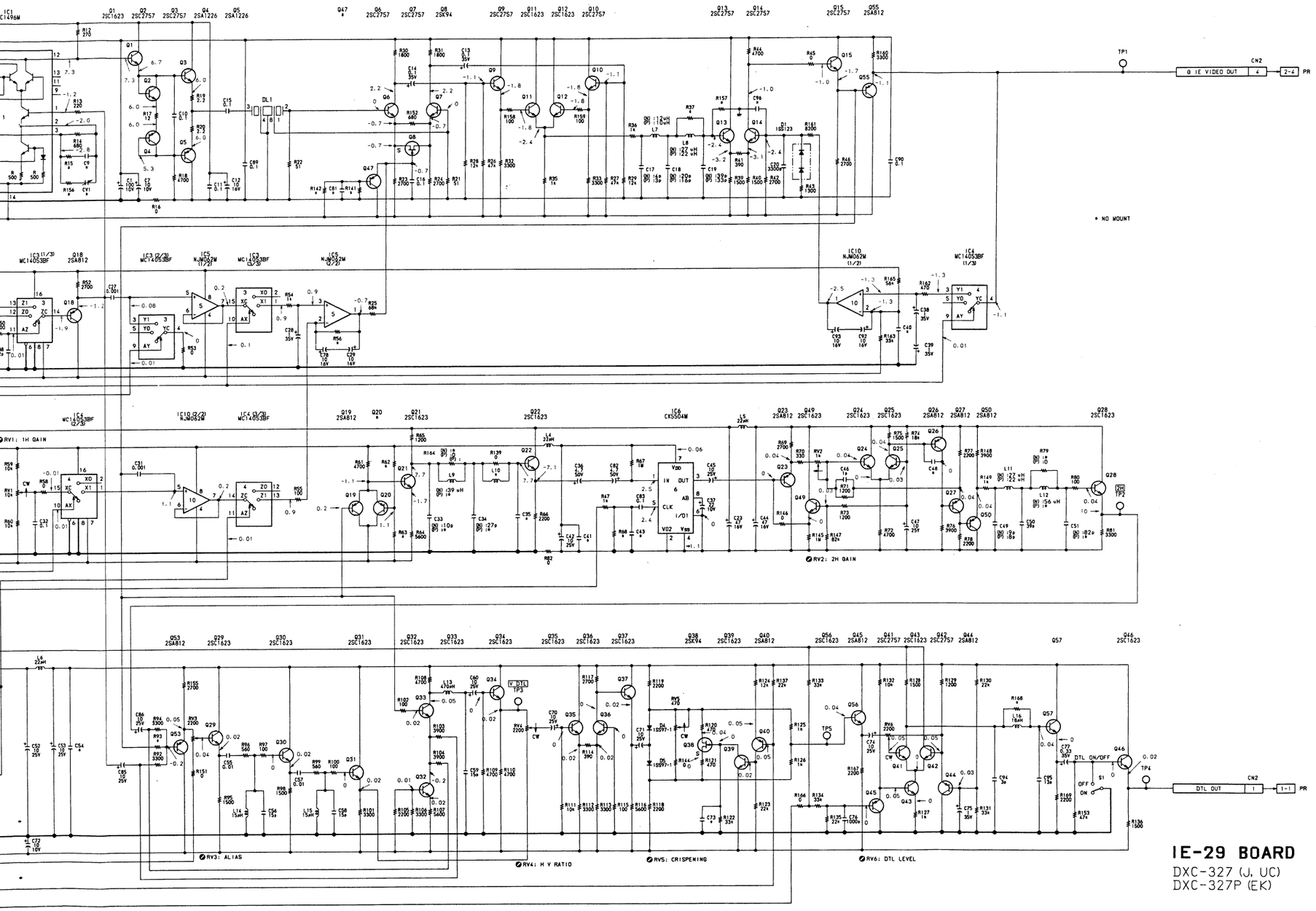


DXC-327 (J, UC)
DXC-327P (EK)

C-19 C-20

A | B | C | D | E | F | G

IE-29



IE-29 BOARD

DXC-327 (J, UC)
DXC-327P (EK)

C-20

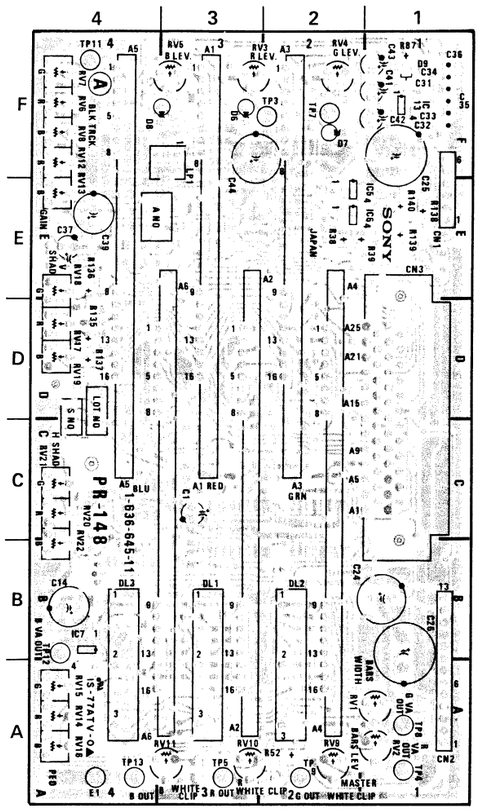
C-21

B-DXC327-IE29/M

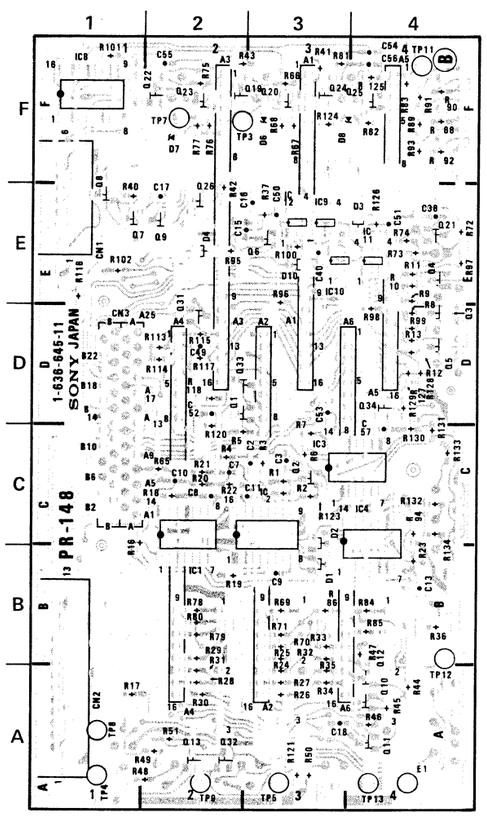
PR-148 BOARD

PR-148 (1-636-645-11)

CN1	E-1	RV1	A-2
CN2	A-1	RV2	A-1
CN3	E-1	RV3	F-3
		RV4	F-2
DL1	B-3	RV5	F-3
DL2	B-2	RV6	F-4
DL3	B-4	RV7	F-4
		RV8	F-4
D3	E-4	RV9	A-2
D4	E-2	RV10	A-3
D6	F-3	RV11	A-3
D7	F-2	RV12	F-4
D8	F-4	RV13	E-4
D9	F-1	RV14	A-4
D10	E-3	RV15	A-4
		RV16	A-4
E1	A-4	RV17	D-4
		RV18	E-4
IC1	B-2	RV19	D-4
IC2	C-3	RV20	C-4
IC3	C-3	RV21	C-4
IC4	C-4	RV22	C-4
IC5	E-1		
IC6	E-1	TP3	F-2
IC7	B-4	TP4	A-1
IC8	F-1	TP5	A-3
IC9	E-3	TP7	F-2
IC10	E-3	TP8	A-1
IC11	E-4	TP9	A-2
IC12	E-3	TP11	F-4
IC13	F-1	TP12	B-4
		TP13	A-4
LP1	F-3		
Q1	D-2		
Q2	C-3		
Q3	D-4		
Q4	E-4		
Q5	D-4		
Q6	E-3		
Q7	E-1		
Q8	E-1		
Q9	E-2		
Q10	A-4		
Q11	A-4		
Q12	B-4		
Q13	A-2		
Q19	F-3		
Q20	F-3		
Q21	E-4		
Q22	F-2		
Q23	F-2		
Q24	F-3		
Q25	F-4		
Q26	E-2		
Q31	D-2		
Q32	A-2		
Q33	D-2		
Q34	D-4		



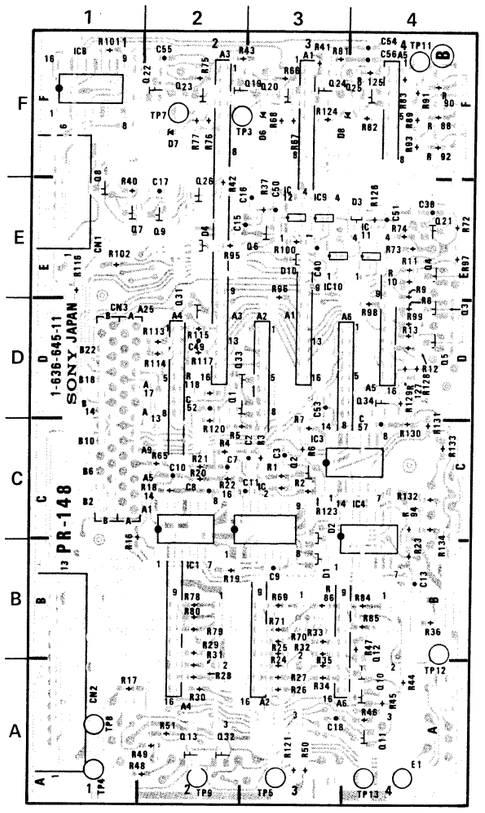
1-636-645-11 COMPONENT SIDE



1-636-645-11 SOLDERING SIDE

PR-148 (1-636-645-11)

CN1	E-1	RV1	A-2
CN2	A-1	RV2	A-1
CN3	E-1	RV3	F-3
		RV4	F-2
DL1	B-3	RV5	F-3
DL2	B-2	RV6	F-4
DL3	B-4	RV7	F-4
		RV8	F-4
D3	E-4	RV9	A-2
D4	E-2	RV10	A-3
D6	F-3	RV11	A-3
D7	F-2	RV12	F-4
D8	F-4	RV13	E-4
D9	F-1	RV14	A-4
D10	E-3	RV15	A-4
		RV16	A-4
E1	A-4	RV17	D-4
		RV18	E-4
IC1	B-2	RV19	D-4
IC2	C-3	RV20	C-4
IC3	C-3	RV21	C-4
IC4	C-4	RV22	C-4
IC5	E-1		
IC6	E-1	TP3	F-2
IC7	B-4	TP4	A-1
IC8	F-1	TP5	A-3
IC9	E-3	TP7	F-2
IC10	E-3	TP8	A-1
IC11	E-4	TP9	A-2
IC12	E-3	TP11	F-4
IC13	F-1	TP12	B-4
		TP13	A-4
LP1	F-3		
Q1	D-2		
Q2	C-3		
Q3	D-4		
Q4	E-4		
Q5	D-4		
Q6	E-3		
Q7	E-1		
Q8	E-1		
Q9	E-2		
Q10	A-4		
Q11	A-4		
Q12	B-4		
Q13	A-2		
Q19	F-3		
Q20	F-3		
Q21	E-4		
Q22	F-2		
Q23	F-2		
Q24	F-3		
Q25	F-4		
Q26	E-2		
Q31	D-2		
Q32	A-2		
Q33	D-2		
Q34	D-4		

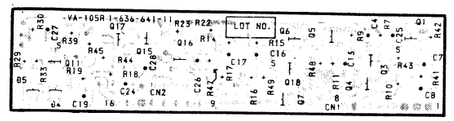


1-636-645-11 SOLDERING SIDE

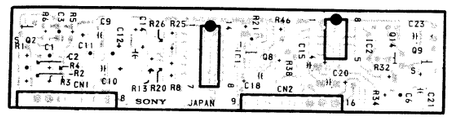
PR-148 (1-636-645-11)

CN1	E-1	RV1	A-2
CN2	A-1	RV2	A-1
CN3	E-1	RV3	F-3
		RV4	F-2
DL1	B-3	RV5	F-3
DL2	B-2	RV6	F-4
DL3	B-4	RV7	F-4
		RV8	F-4
D3	E-4	RV9	A-2
D4	E-2	RV10	A-3
D6	F-3	RV11	A-3
D7	F-2	RV12	F-4
D8	F-4	RV13	E-4
D9	F-1	RV14	A-4
D10	E-3	RV15	A-4
		RV16	A-4
E1	A-4	RV17	D-4
		RV18	E-4
IC1	B-2	RV19	D-4
IC2	C-3	RV20	C-4
IC3	C-3	RV21	C-4
IC4	C-4	RV22	C-4
IC5	E-1		
IC6	E-1	TP3	F-2
IC7	B-4	TP4	A-1
IC8	F-1	TP5	A-3
IC9	E-3	TP7	F-2
IC10	E-3	TP8	A-1
IC11	E-4	TP9	A-2
IC12	E-3	TP11	F-4
IC13	F-1	TP12	B-4
		TP13	A-4
LP1	F-3		
Q1	D-2		
Q2	C-3		
Q3	D-4		
Q4	E-4		
Q5	D-4		
Q6	E-3		
Q7	E-1		
Q8	E-1		
Q9	E-2		
Q10	A-4		
Q11	A-4		
Q12	B-4		
Q13	A-2		
Q19	F-3		
Q20	F-3		
Q21	E-4		
Q22	F-2		
Q23	F-2		
Q24	F-3		
Q25	F-4		
Q26	E-2		
Q31	D-2		
Q32	A-2		
Q33	D-2		
Q34	D-4		

VA-105R BOARD

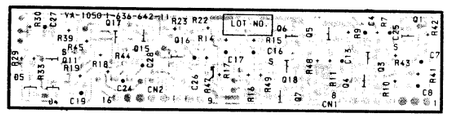


1-636-641-11 COMPONENT SIDE

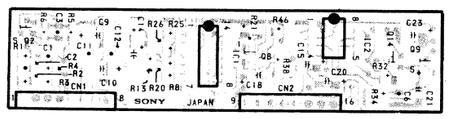


1-636-641-11 SOLDERING SIDE

VA-105G BOARD

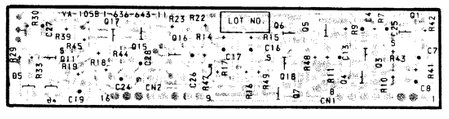


1-636-642-11 COMPONENT SIDE

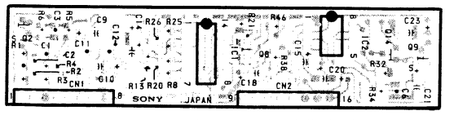


1-636-642-11 SOLDERING SIDE

VA-105B BOARD

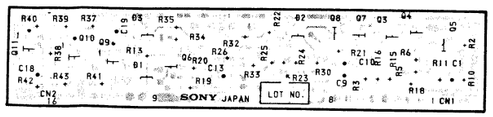


1-636-643-11 COMPONENT SIDE

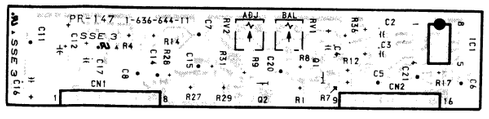


1-636-643-11 SOLDERING SIDE

PR-147R/G/B BOARD



1-636-644-11 COMPONENT SIDE



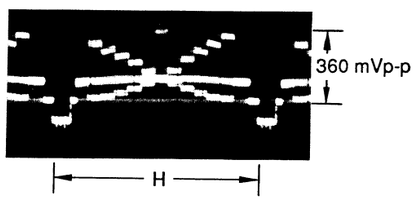
1-636-644-11 SOLDERING SIDE

PR-148 BOARD

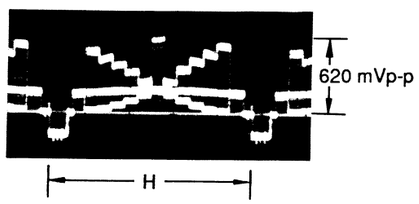
NOTE:

1. All voltage are DC, measured with a digital voltmeter.
2. All waveforms are taken and DC voltage is measured in condition below.
   - Shoot the grayscale chart. Adjust lens iris so that a white level is 100 IRE on the waveform monitor.
   - GAIN : 0 dB
   - WHITE BAL : PRE
   - ABL : OFF
   - SHUTTER : OFF
   - ZEBRA : OFF
   - VF MARKER : OFF
   - PHASE : 0°
   - BARS : OFF

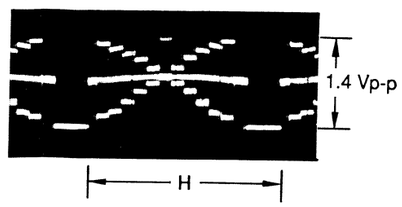
TP3



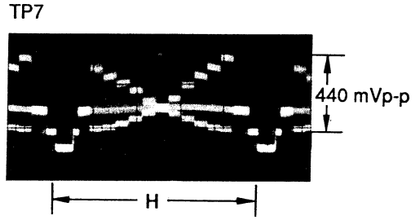
TP4



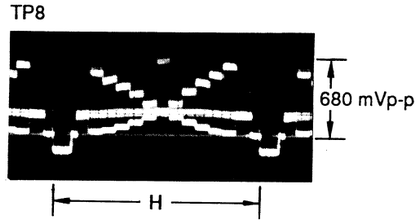
TP5



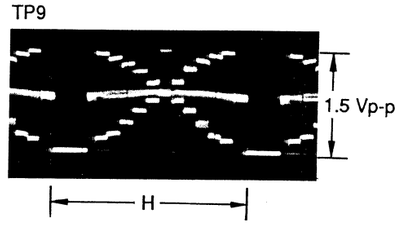
TP7



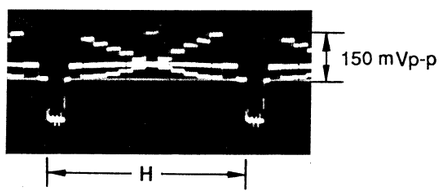
TP8



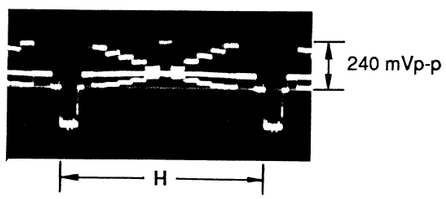
TP9



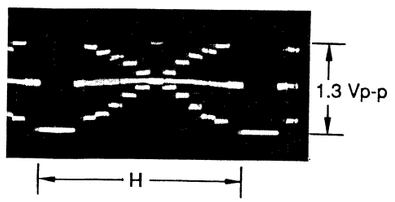
TP11



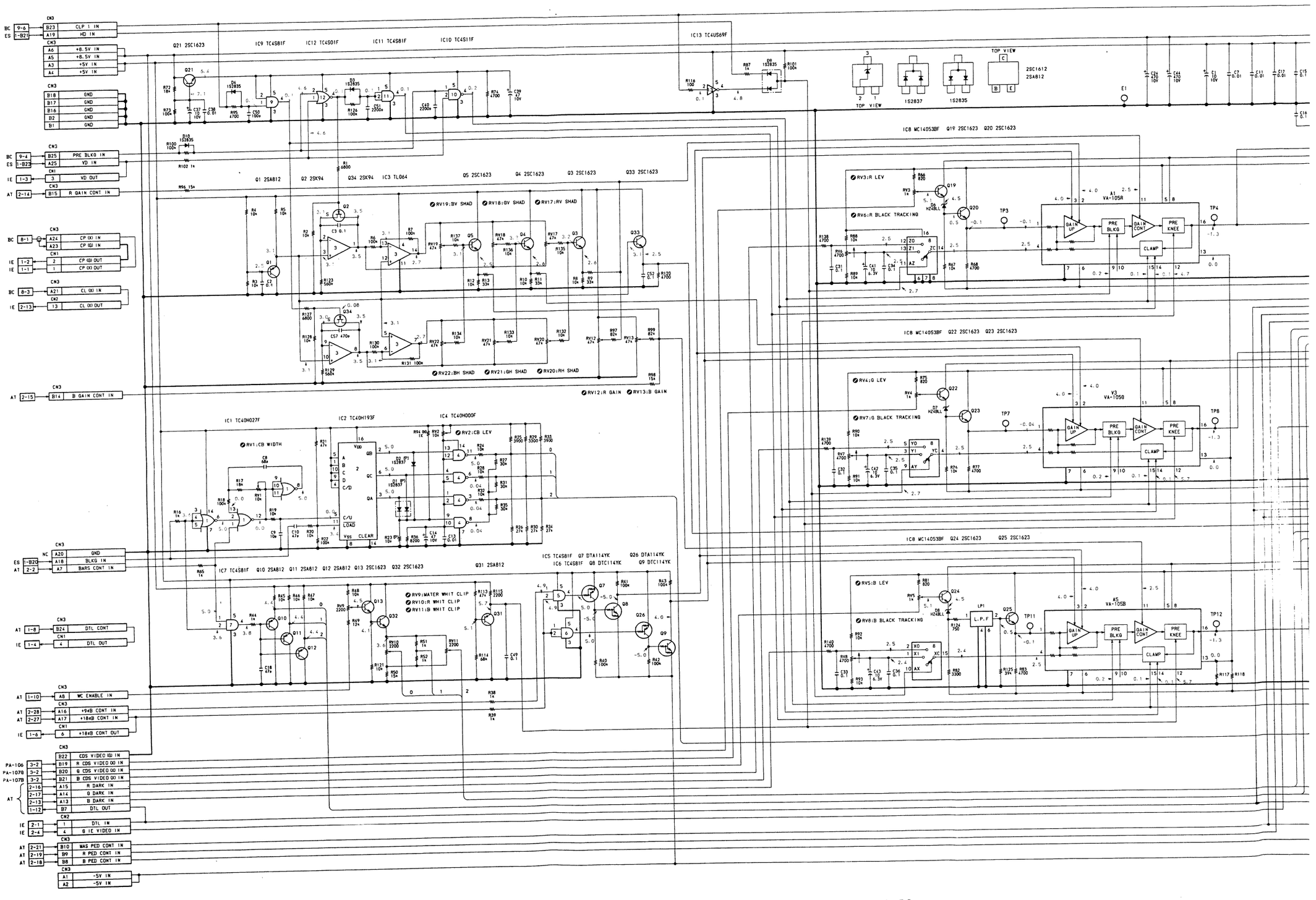
TP12



TP13



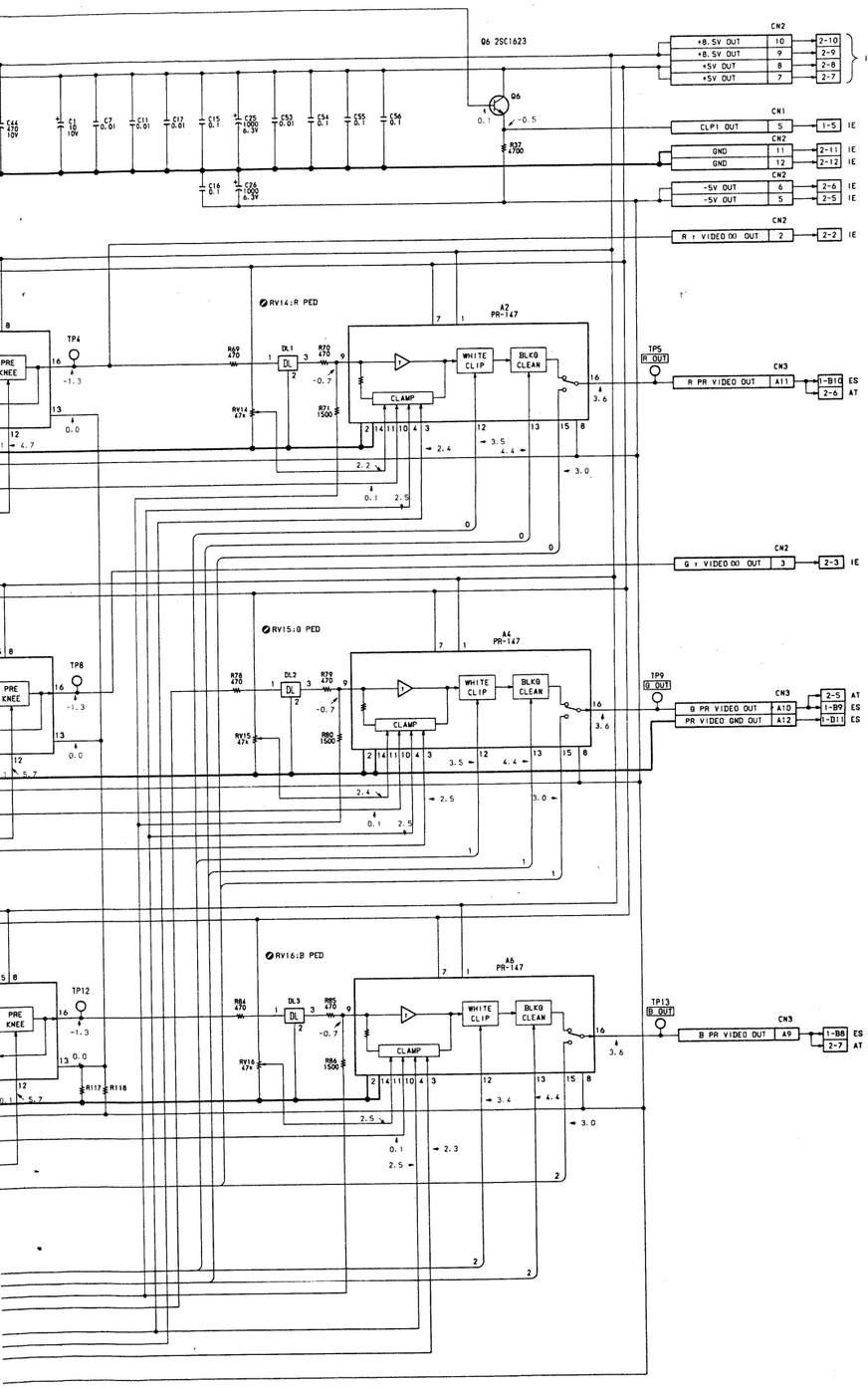
PR-148 BOARD
VA-105R/G/B BOARD
PR-147R/G/B BOARD

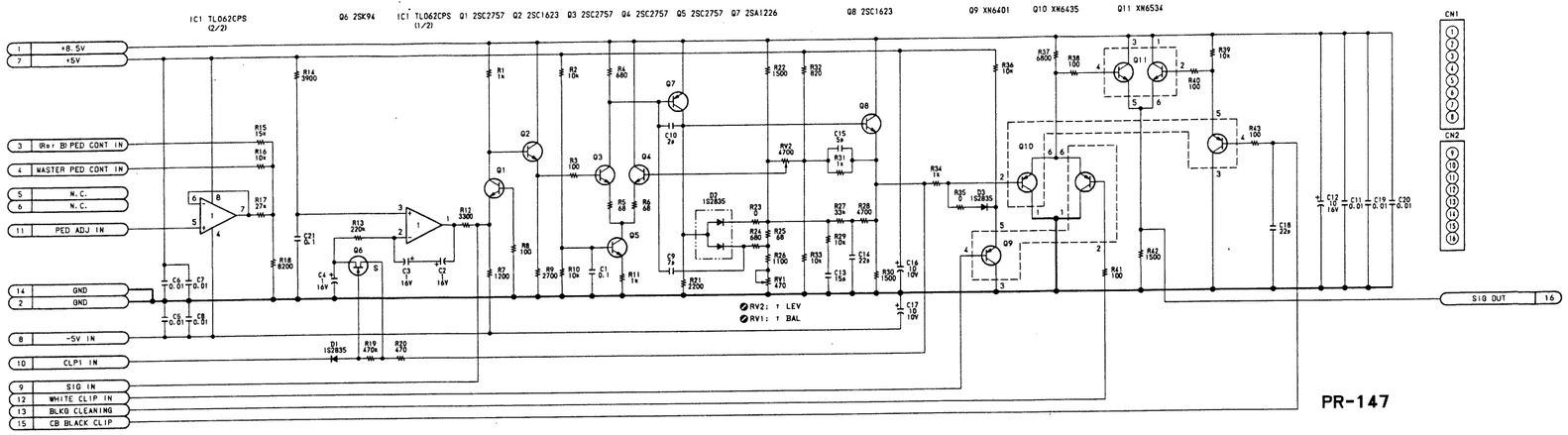


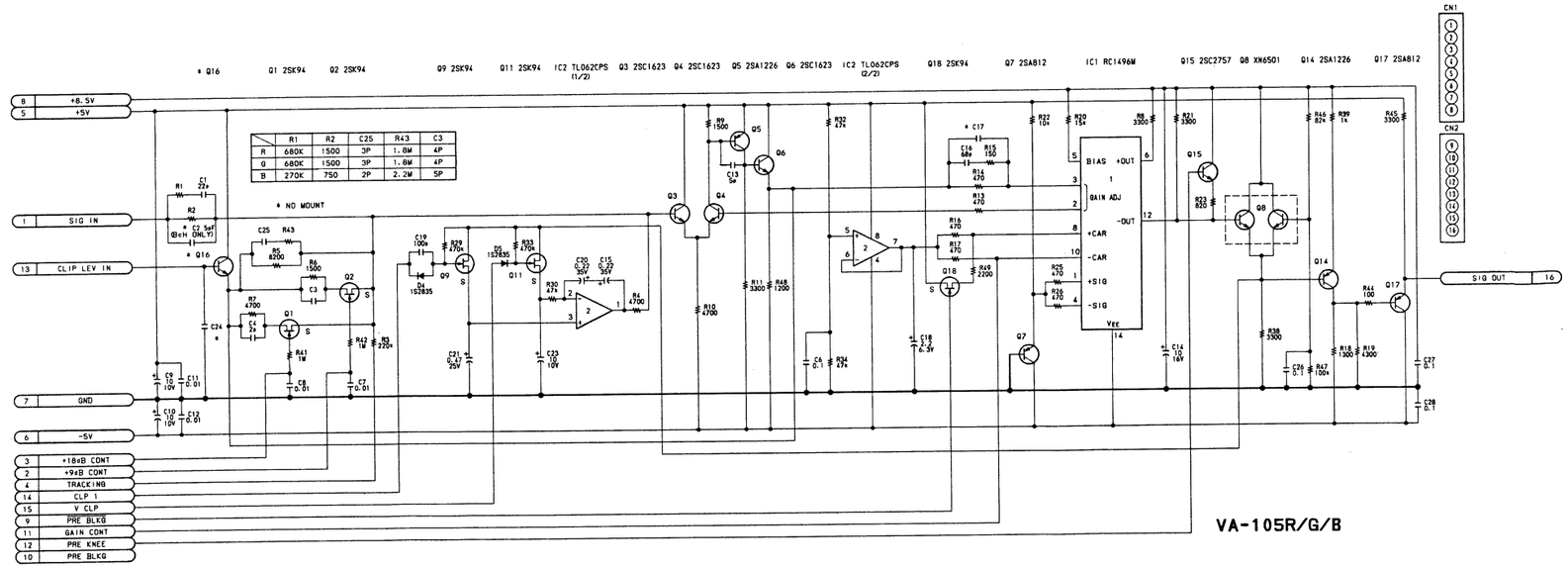
DXC-327 (J, UC)
DXC-327P (EK)

C-29 C-30

A | B | C | D | E | F | G







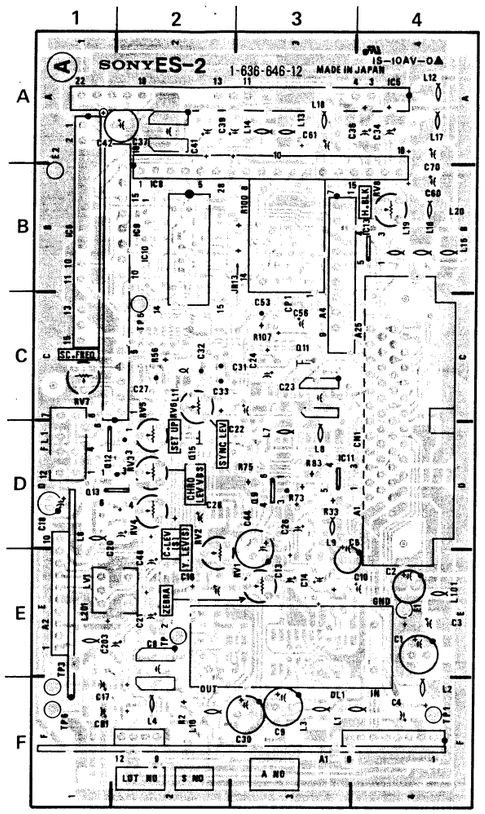
PR-148 BOARD
PR-147 BOARD
VA-105R/G/B BOARD
DXC-327 (J, UC)
DXC-327P (EK)

C-31 C-32

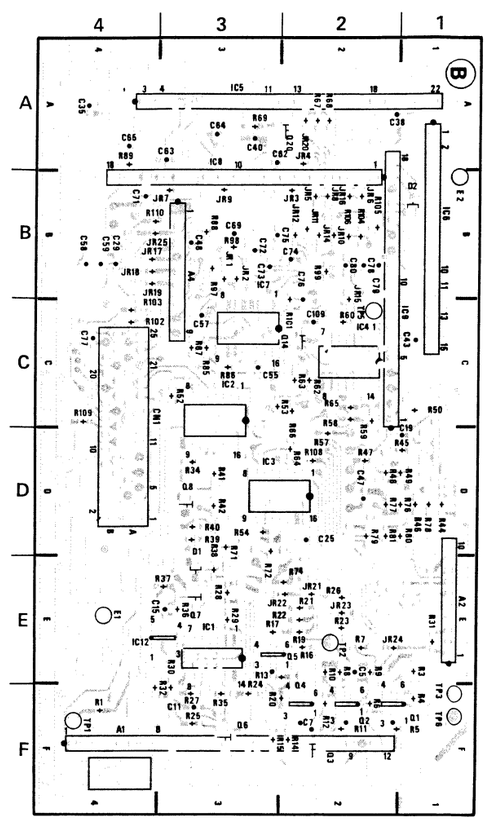
ES-2 BOARD

ES-2 (1-636-646-12)

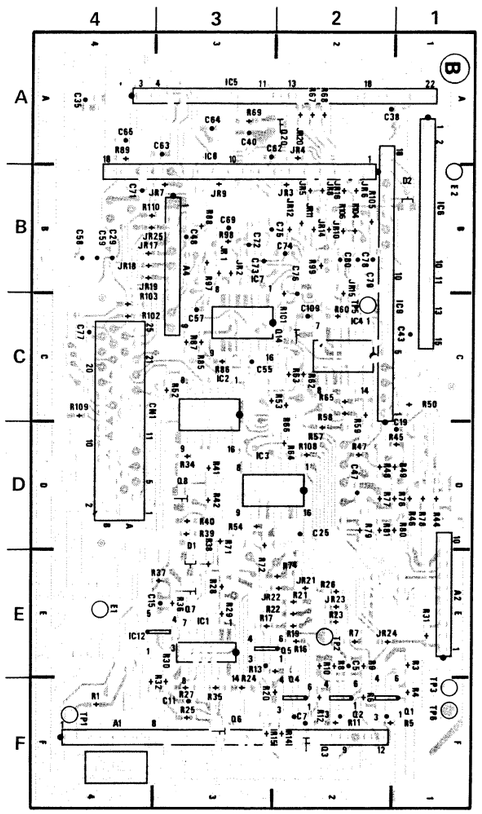
CN1	D-4	TP1	F-4
		TP2	E-2
DL1	F-3	TP5	C-2
D1	D-3		
D2	B-1		
E1	E-4		
FL1	D-1		
IC1	E-3		
IC2	C-3		
IC3	D-3		
IC4	C-2		
IC5	A-4		
IC6	B-1		
IC7	B-3		
IC8	B-2		
IC9	B-2		
IC10	B-2		
IC11	D-3		
IC12	E-4		
IC13	B-4		
JR2	B-3		
JR3	B-2		
JR4	A-2		
JR6	B-2		
JR8	B-2		
JR9	B-3		
JR13	B-3		
JR14	B-2		
JR15	B-2		
JR18	B-4		
JR20	A-2		
JR22	E-2		
JR23	E-2		
LV1	E-1		
Q1	F-1		
Q2	F-2		
Q3	F-2		
Q4	F-2		
Q5	E-2		
Q6	F-3		
Q7	E-3		
Q8	D-3		
Q9	D-3		
Q11	C-3		
Q12	D-1		
Q13	D-1		
Q14	C-2		
Q15	D-2		
Q20	A-2		
RV1	E-3		
RV2	D-2		
RV3	D-2		
RV4	D-2		
RV5	C-2		
RV6	C-2		
RV7	C-1		
RV8	B-4		



1-636-646-12 COMPONENT SIDE



1-636-646-12 SOLDERING SIDE

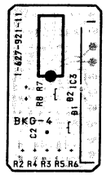


1-636-646-12 SOLDERING SIDE

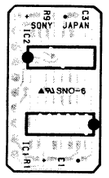
ES-2 (1-636-646-12)

CN1	D-4	TP1	F-4
		TP2	E-2
DL1	F-3	TP5	C-2
D1	D-3		
D2	B-1		
E1	E-4		
FL1	D-1		
IC1	E-3		
IC2	C-3		
IC3	D-3		
IC4	C-2		
IC5	A-4		
IC6	B-1		
IC7	B-3		
IC8	B-2		
IC9	B-2		
IC10	B-2		
IC11	D-3		
IC12	E-4		
IC13	B-4		
JR2	B-3		
JR3	B-2		
JR4	A-2		
JR6	B-2		
JR8	B-2		
JR9	B-3		
JR13	B-3		
JR14	B-2		
JR15	B-2		
JR18	B-4		
JR20	A-2		
JR22	E-2		
JR23	E-2		
LV1	E-1		
Q1	F-1		
Q2	F-2		
Q3	F-2		
Q4	F-2		
Q5	E-2		
Q6	F-3		
Q7	E-3		
Q8	D-3		
Q9	D-3		
Q11	C-3		
Q12	D-1		
Q13	D-1		
Q14	C-2		
Q15	D-2		
Q20	A-2		
RV1	E-3		
RV2	D-2		
RV3	D-2		
RV4	D-2		
RV5	C-2		
RV6	C-2		
RV7	C-1		
RV8	B-4		

BKG-4 BOARD (NTSC ONLY)

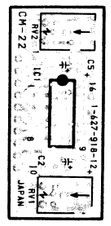


1-627-921-11 COMPONENT SIDE

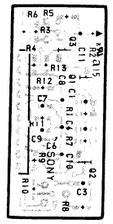


1-627-921-11 SOLDERING SIDE

CM-22 BOARD

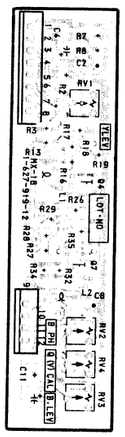


1-627-918-12 COMPONENT SIDE

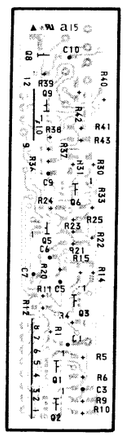


1-627-918-12 SOLDERING SIDE

MX-18 BOARD



1-627-919-12 COMPONENT SIDE



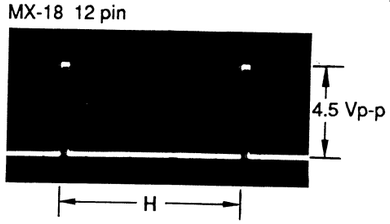
1-627-919-12 SOLDERING SIDE

ES-2 BOARD

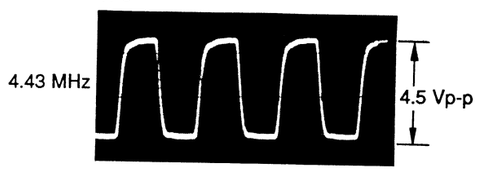
NOTE:

1. All voltage are DC, measured with a digital voltmeter.
2. All waveforms are taken and DC voltage is measured in condition below.
   - Shoot the grayscale chart. Adjust lens iris so that a white level is 100 IRE on the waveform monitor.
   - GAIN : 0 dB
   - WHITE BAL : PRE
   - ABL : OFF
   - SHUTTER : OFF
   - ZEBRA : OFF
   - VF MARKER : OFF
   - PHASE : 0°
   - BARS : ON

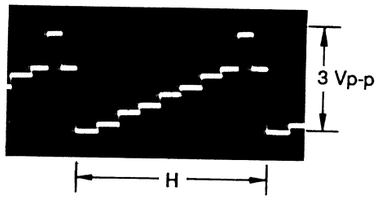
MX-18 12 pin



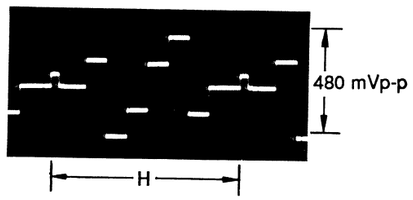
TP5



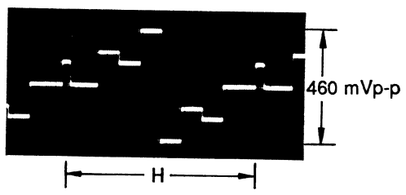
TP1



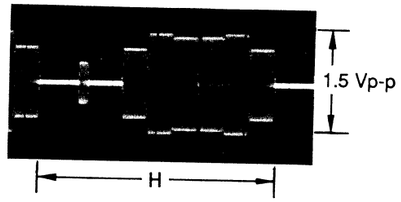
TP3



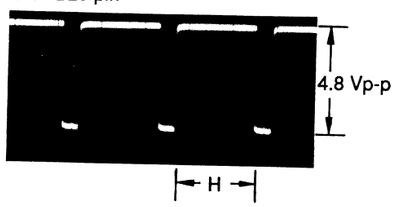
TP6



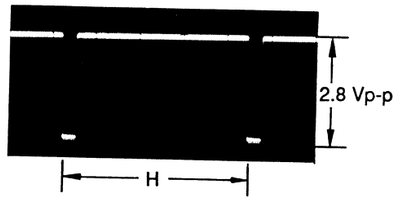
TP4



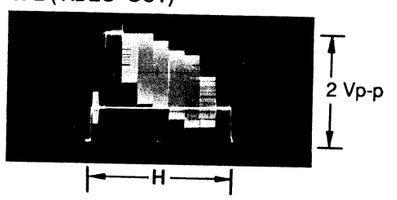
CN1-B20 pin



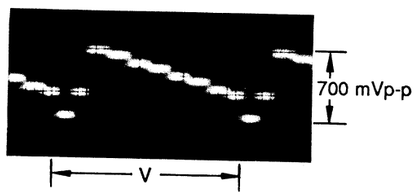
CN1-A21 pin



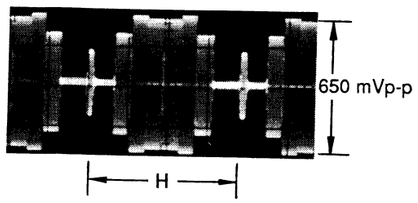
TP2 (VIDEO OUT)



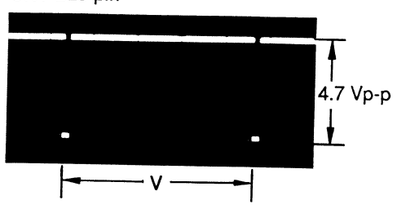
A9



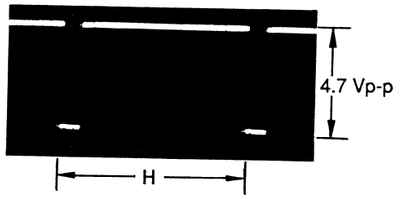
CN1-A11 pin



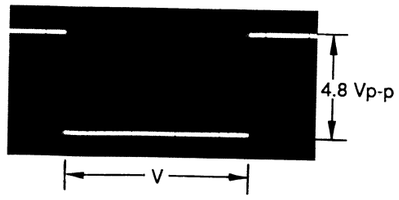
CN1-B23 pin



CN1-B21 pin



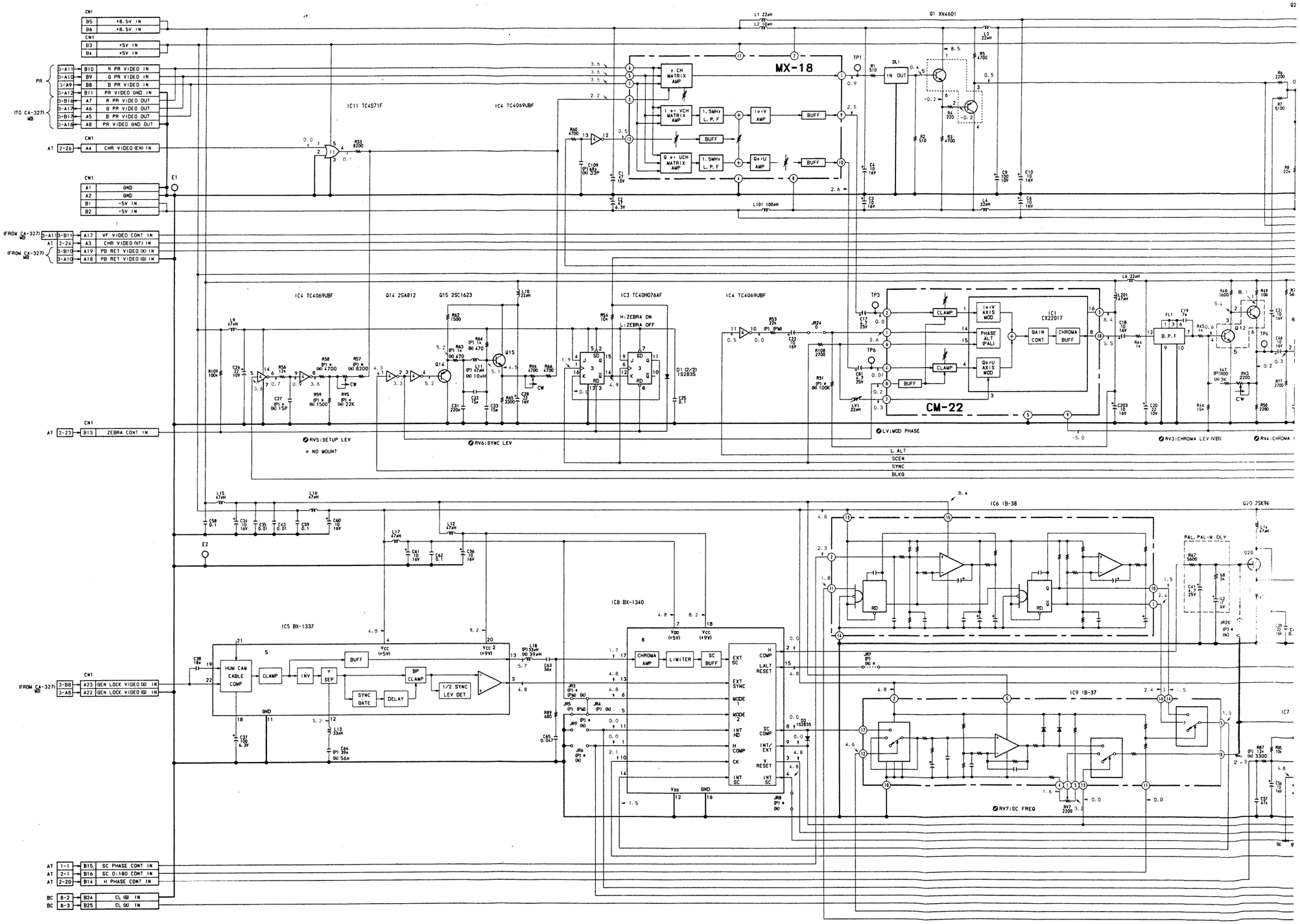
CN1-A24 pin



BKG-4, CM-22
MX-18 ES-2

ES-2 BKG-4, CM-22
MX-18

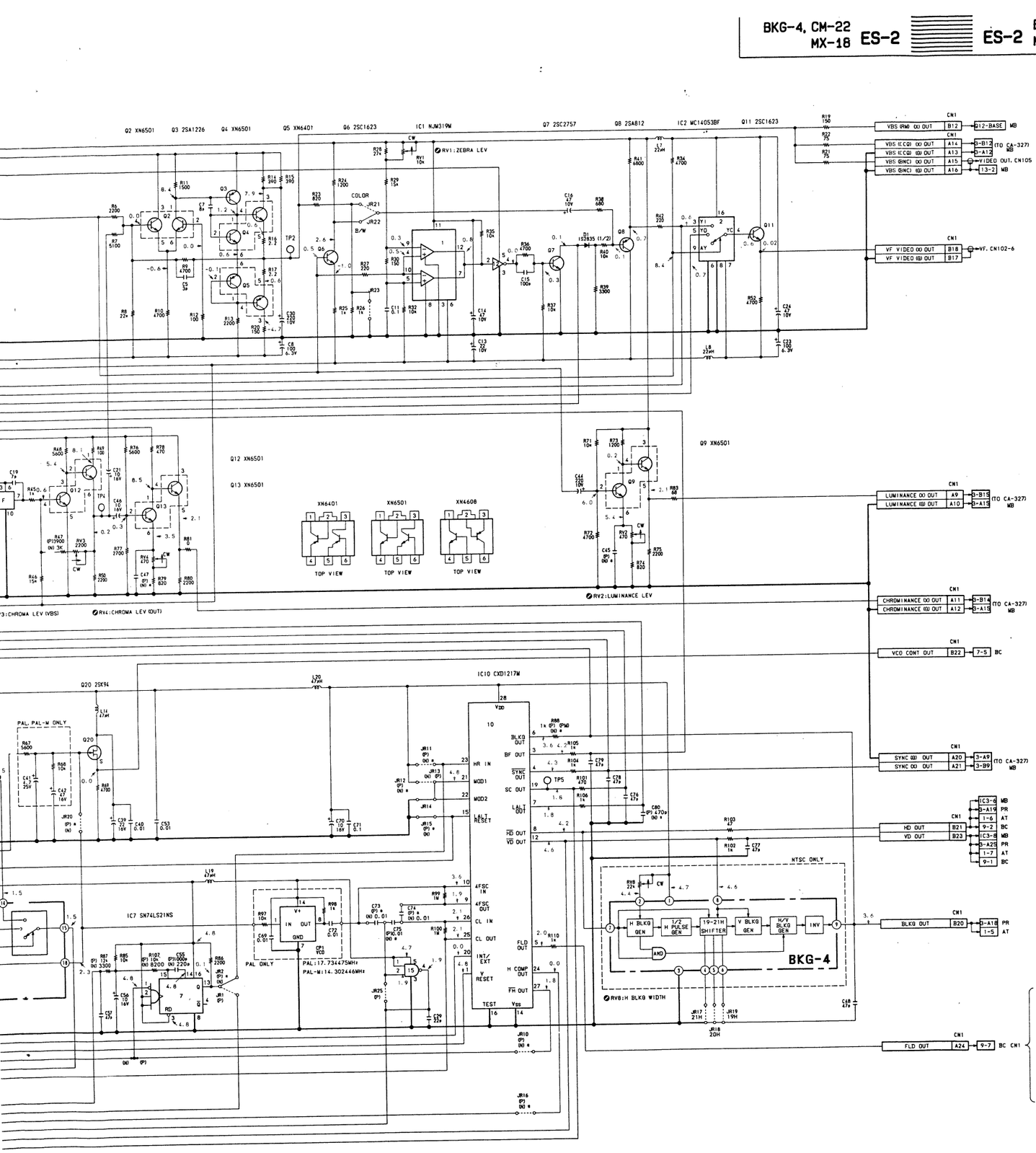
ES-2 BOARD
BKG-4 BOARD
CM-22 BOARD
MX-18 BOARD

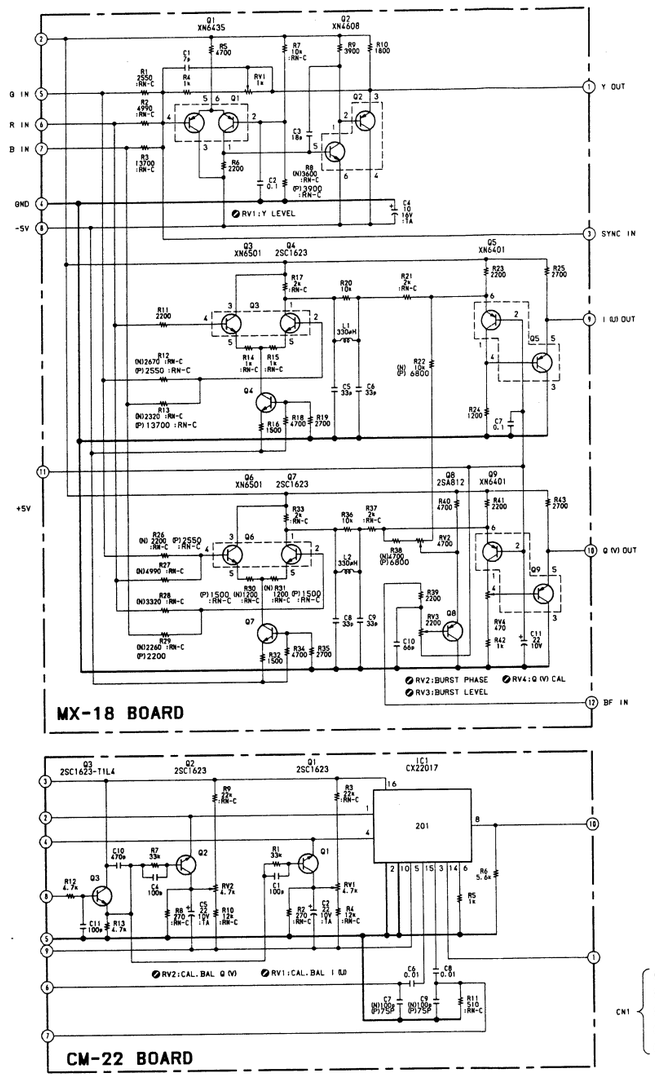


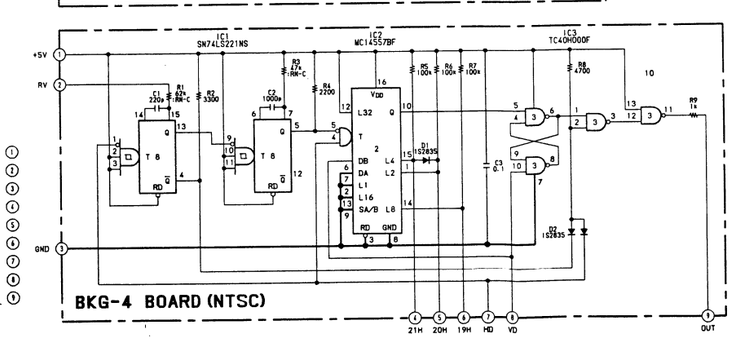
DXC-327 (J, UC)
DXC-327P (EK)

C-41 C-42

A | B | C | D | E | F | G







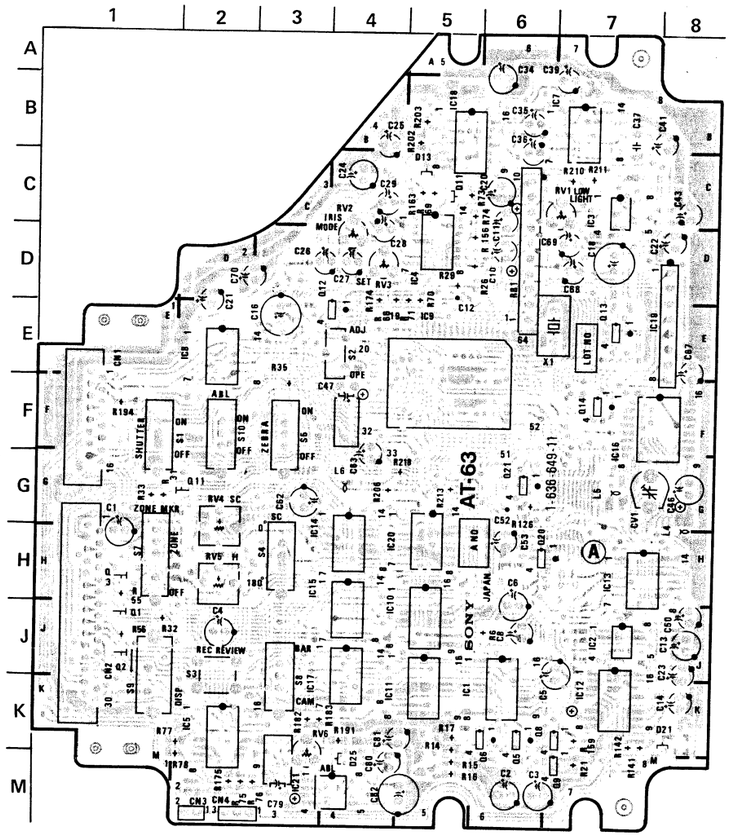
ES-2N/2P BOARD

CM-22 BOARD
BKG-4 BOARD (J, UC)
MX-18 BOARD
DXC-327 (J, UC)
DXC-327P (EK)

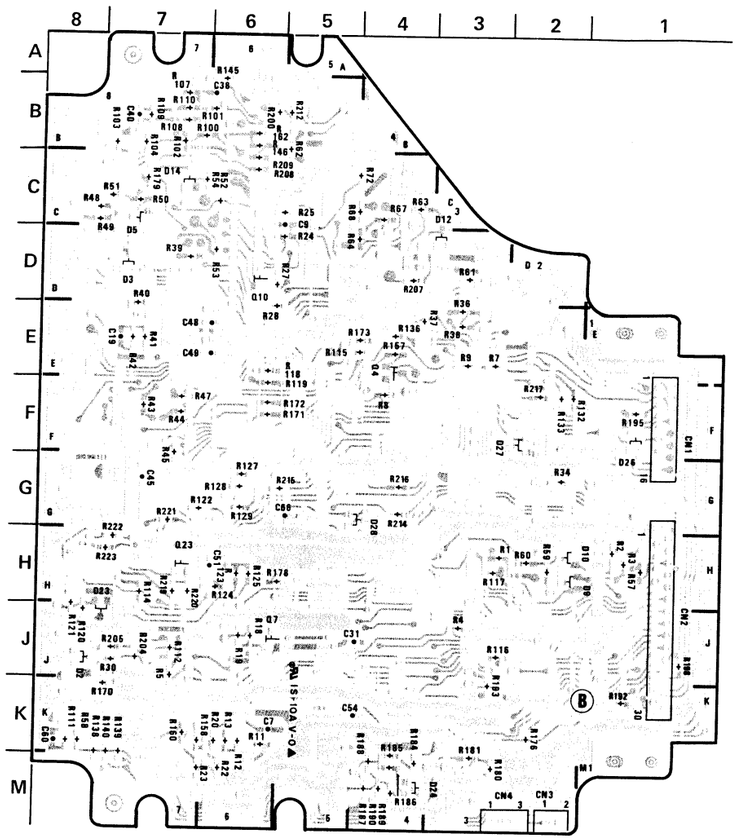
AT-63 BOARD

AT-63 (1-636-649-11)

CN1	E-1
CN2	J-1
CN3	M-2
CN4	M-2
CV1	G-8
D2	J-8
D3	D-8
D5	D-7
D9	H-1
D10	H-1
D11	C-5
D12	C-3
D13	C-5
D14	C-7
D21	K-8
D23	H-8
D24	M-3
D25	M-4
D26	F-1
D27	F-3
D28	G-4
IC1	K-5
IC2	J-7
IC3	C-7
IC4	D-5
IC5	K-2
IC7	B-7
IC8	E-2
IC9	E-5
IC10	J-4
IC11	K-4
IC12	K-7
IC13	H-7
IC14	H-3
IC15	H-3
IC16	F-7
IC17	K-3
IC18	B-5
IC19	E-8
IC20	H-4
IC21	M-3
Q1	J-1
Q2	J-1
Q3	H-1
Q4	E-4
Q5	M-6
Q6	M-6
Q7	J-6
Q8	K-6
Q9	M-7
Q10	D-6
Q11	G-2
Q12	D-3
Q13	E-7
Q14	F-7
Q20	H-6
Q21	G-6
Q23	H-7
RB1	D-6
RV1	C-7
RV2	C-4
RV3	D-4
RV4	G-2
RV5	H-2
RV6	K-3
S1	F-2
S2	E-4
S3	J-2
S4	H-3
S5	F-3
S7	H-1
S8	J-3
S9	K-1
S10	F-2
X1	E-6



1-636-649-11 COMPONENT SIDE



1-636-649-11 SOLDERING SIDE

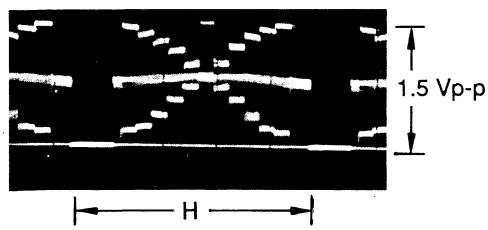
AT-63 (1-636-649-11)

CN1	E-1
CN2	J-1
CN3	M-2
CN4	M-2
CV1	G-8
D2	J-8
D3	D-8
D5	D-7
D9	H-1
D10	H-1
D11	C-5
D12	C-3
D13	C-5
D14	C-7
D21	K-8
D23	H-8
D24	M-3
D25	M-4
D26	F-1
D27	F-3
D28	G-4
IC1	K-5
IC2	J-7
IC3	C-7
IC4	D-5
IC5	K-2
IC7	B-7
IC8	E-2
IC9	E-5
IC10	J-4
IC11	K-4
IC12	K-7
IC13	H-7
IC14	H-3
IC15	H-3
IC16	F-7
IC17	K-3
IC18	B-5
IC19	E-8
IC20	H-4
IC21	M-3
Q1	J-1
Q2	J-1
Q3	H-1
Q4	E-4
Q5	M-6
Q6	M-6
Q7	J-6
Q8	K-6
Q9	M-7
Q10	D-6
Q11	G-2
Q12	D-3
Q13	E-7
Q14	F-7
Q20	H-6
Q21	G-6
Q23	H-7
RB1	D-6
RV1	C-7
RV2	C-4
RV3	D-4
RV4	G-2
RV5	H-2
RV6	K-3
S1	F-2
S2	E-4
S3	J-2
S4	H-3
S5	F-3
S7	H-1
S8	J-3
S9	K-1
S10	F-2
X1	E-6

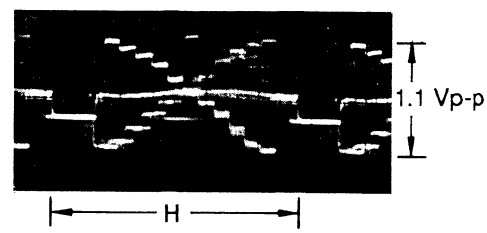
AT-63 BOARD

NOTE:
1. All voltage are DC, measured with a digital voltmeter.
2. All waveforms are taken and DC voltage is measured in condition below.
   - Shoot the grayscale chart. Adjust lens iris so that a white level is 100 IRE on the waveform monitor.
   - GAIN : 0 dB
   - WHITE BAL : PRE
   - ABL : OFF
   - SHUTTER : OFF
   - ZEBRA : OFF
   - VF MARKER : OFF
   - PHASE : 0°
   - BARS : OFF

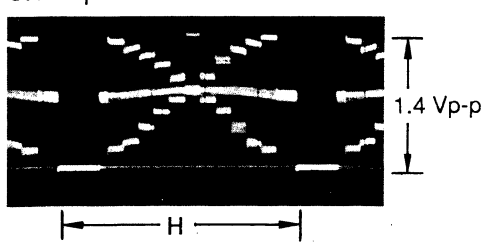
CN2-5 pin



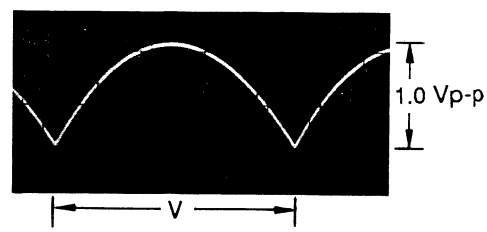
IC4-5 pin



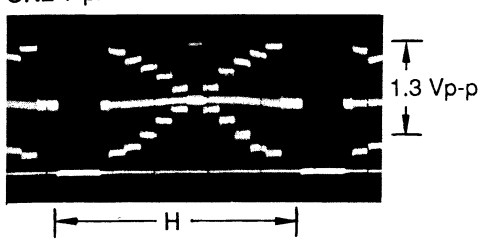
CN2-6 pin



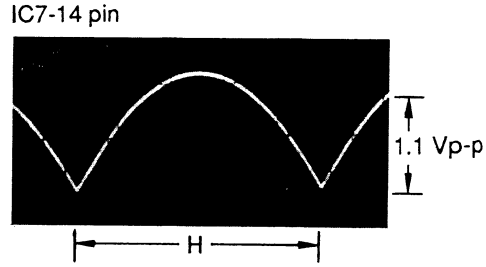
IC7-8 pin



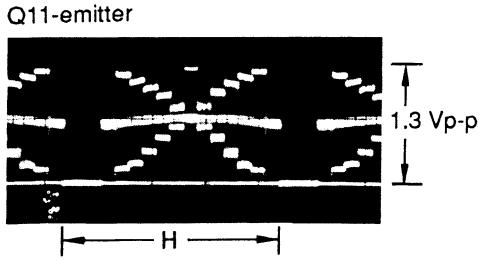
CN2-7 pin



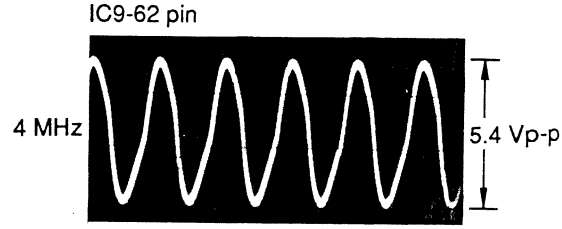
IC7-14 pin



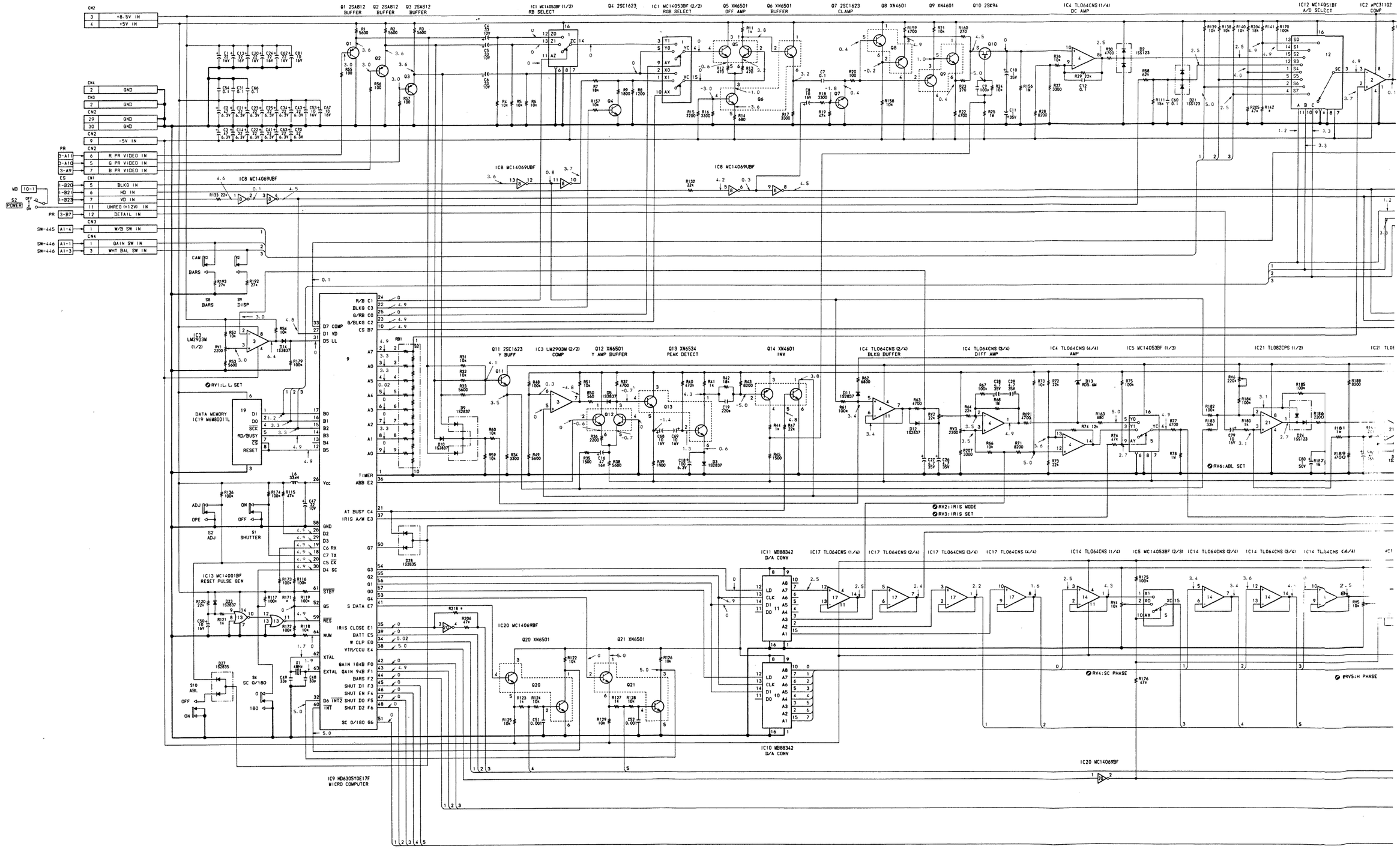
Q11-emitter



IC9-62 pin



AT-63 BOARD

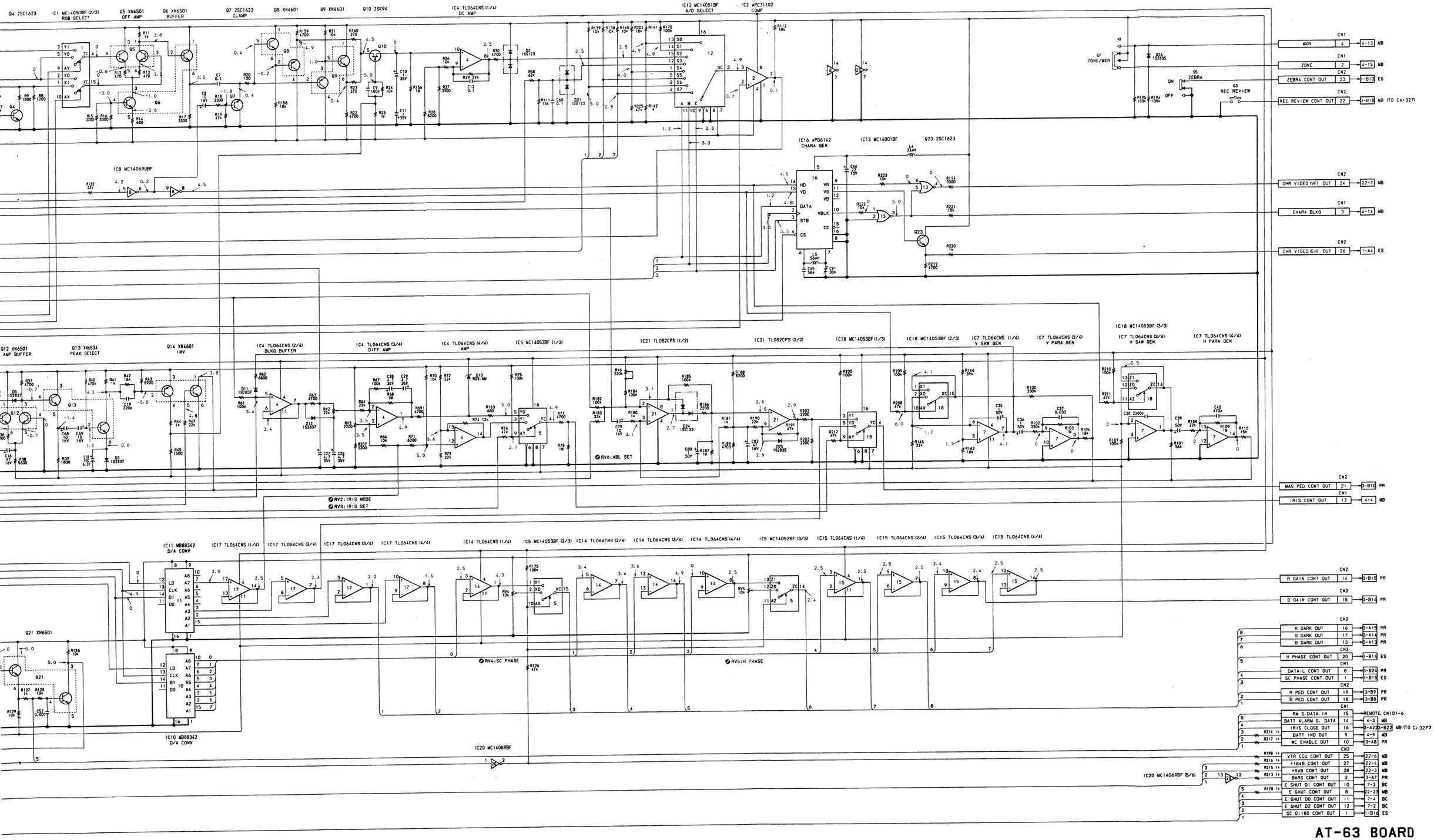


DXC-327 (J, UC)
DXC-327P (EK)

C-51 C-52

A | B | C | D | E | F | G

AT-63



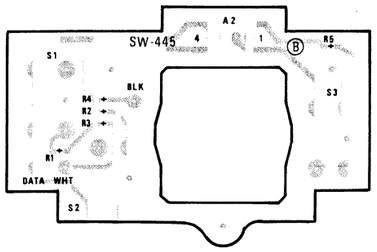
AT-63 BOARD

DXC-327 (J, UC)
DXC-327P (EK)

B-DXC327-AT63/M

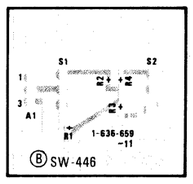
C-52 C-53

SW-445 BOARD



1-636-658-11 SOLDERING SIDE

SW-446 BOARD

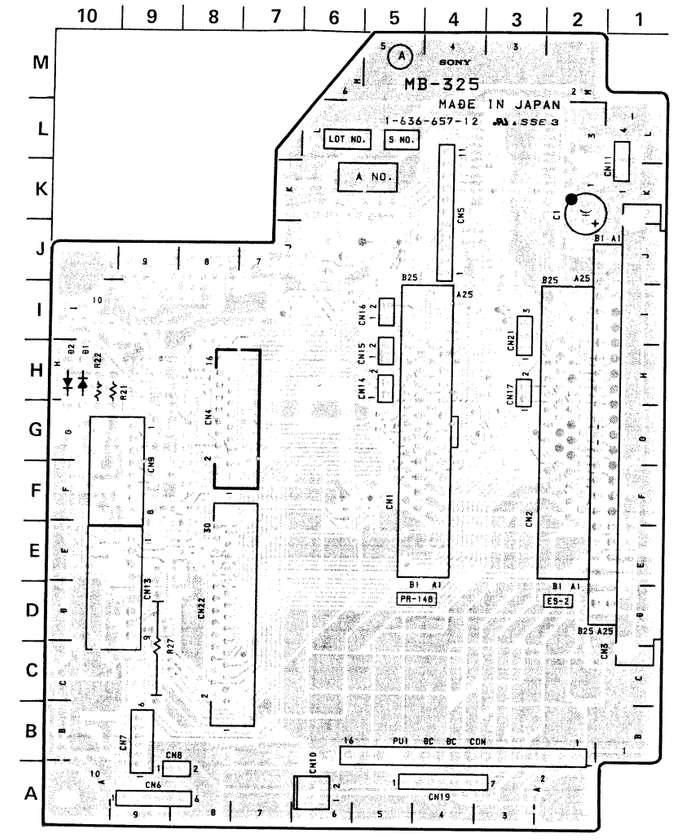


1-636-659-11 SOLDERING SIDE

MB-325 BOARD

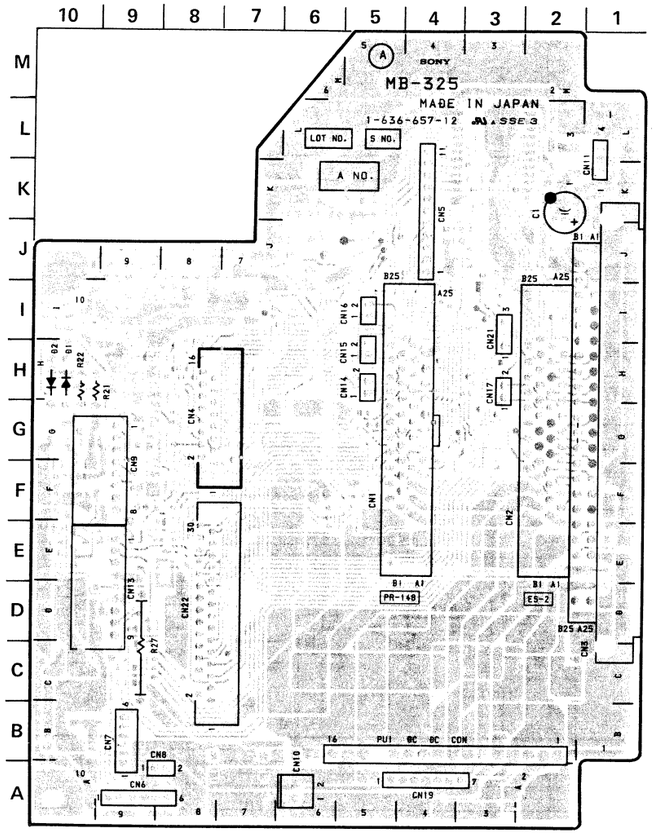
MB-325 (1-636-657-12)

CN1	F-5
CN2	F-3
CN3	C-1
CN4	G-8
CN5	L-5
CN6	A-9
CN7	B-9
CN8	B-8
CN9	F-9
CN10	A-6
CN11	K-1
CN13	D-9
CN14	H-6
CN15	H-6
CN16	I-6
CN17	H-4
CN19	A-4
CN21	I-4
CN22	D-8
D1	H-10
D2	H-10
D3	E-10
IC1	C-9
IC2	H-9
IC3	K-2
Q1	I-10
Q2	I-10
Q3	G-9
Q4	H-9
Q5	F-9
Q6	F-10
Q7	F-10
Q8	G-10
Q9	G-10
Q10	J-5
Q11	K-6
Q12	J-8
Q13	I-9
Q14	I-9
S1	J-5
S2	J-7

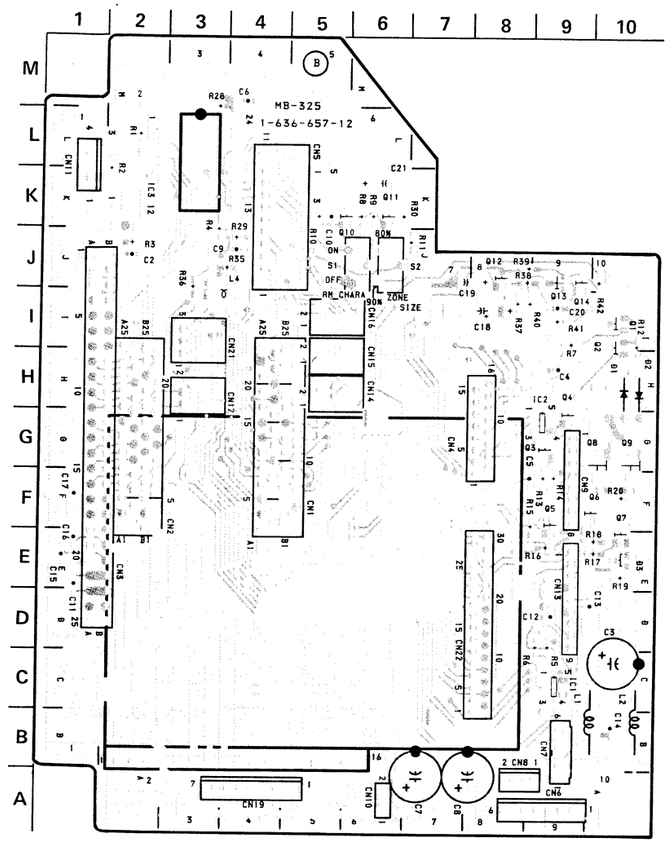


1-636-657-11, 12 COMPONENT SIDE

MB-325 BOARD



1-636-657-11, 12 COMPONENT SIDE



1-636-657-11, 12 SOLDERING SIDE

MB-325 (1-636-657-12)

CN1	F-5
CN2	F-3
CN3	C-1
CN4	G-8
CN5	L-5
CN6	A-9
CN7	B-9
CN8	B-8
CN9	F-9
CN10	A-6
CN11	K-1
CN13	D-9
CN14	H-6
CN15	H-6
CN16	I-6
CN17	H-4
CN19	A-4
CN21	I-4
CN22	D-8
D1	H-10
D2	H-10
D3	E-10
IC1	C-9
IC2	H-9
IC3	K-2
Q1	I-10
Q2	I-10
Q3	G-9
Q4	H-9
Q5	F-9
Q6	F-10
Q7	F-10
Q8	G-10
Q9	G-10
Q10	J-5
Q11	K-6
Q12	J-8
Q13	I-9
Q14	I-9
S1	J-5
S2	J-7

MB-325 (1-636-657-12)

CN1 F-5
CN2 F-3
CN3 C-1
CN4 G-8
CN5 L-5
CN6 A-9
CN7 B-9
CN8 B-8
CN9 F-9
CN10 A-6
CN11 K-1
CN13 D-9
CN14 H-6
CN15 H-6
CN16 I-6
CN17 H-4
CN19 A-4
CN21 I-4
CN22 D-8

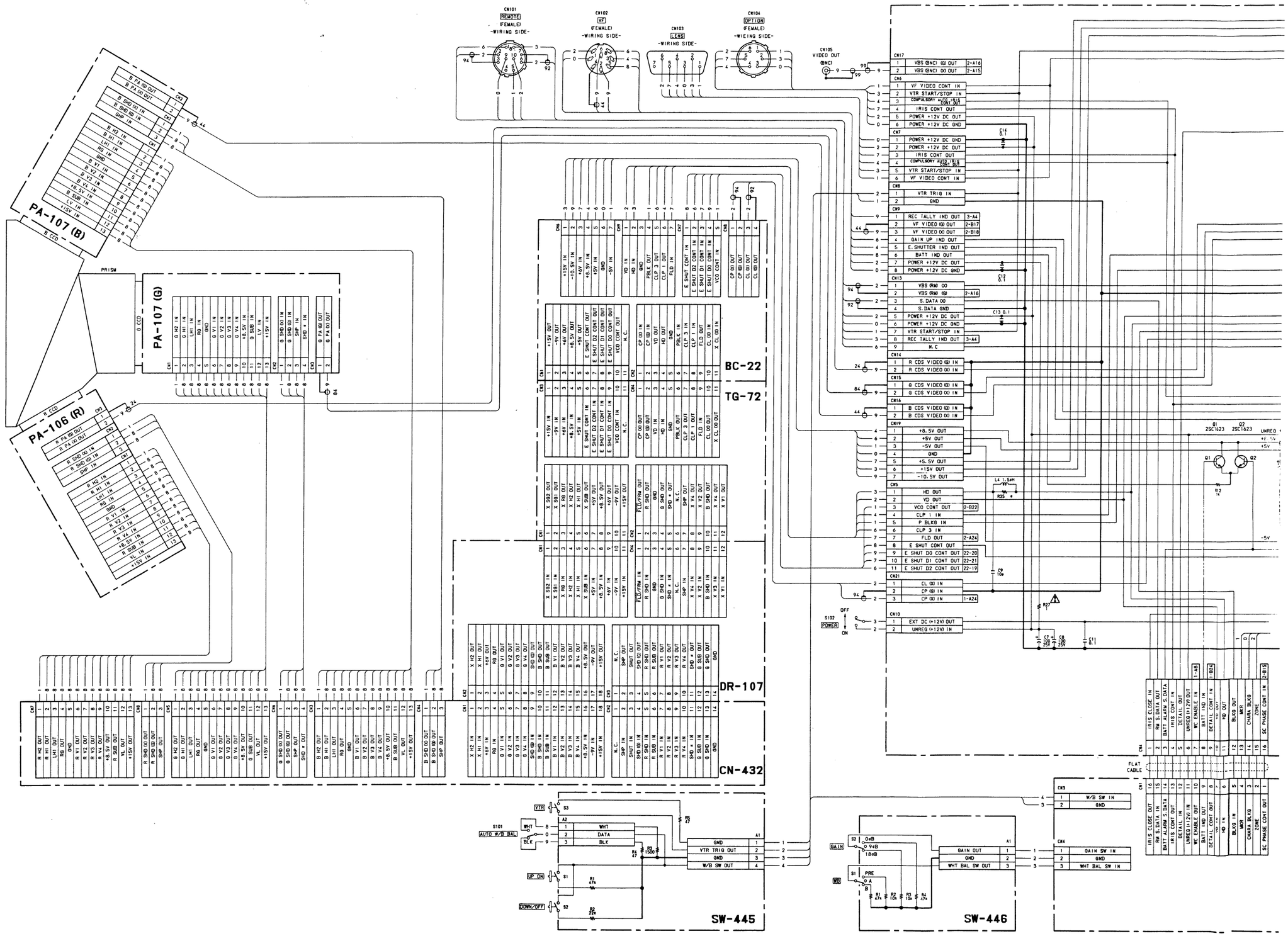
D1 H-10
D2 H-10
D3 E-10

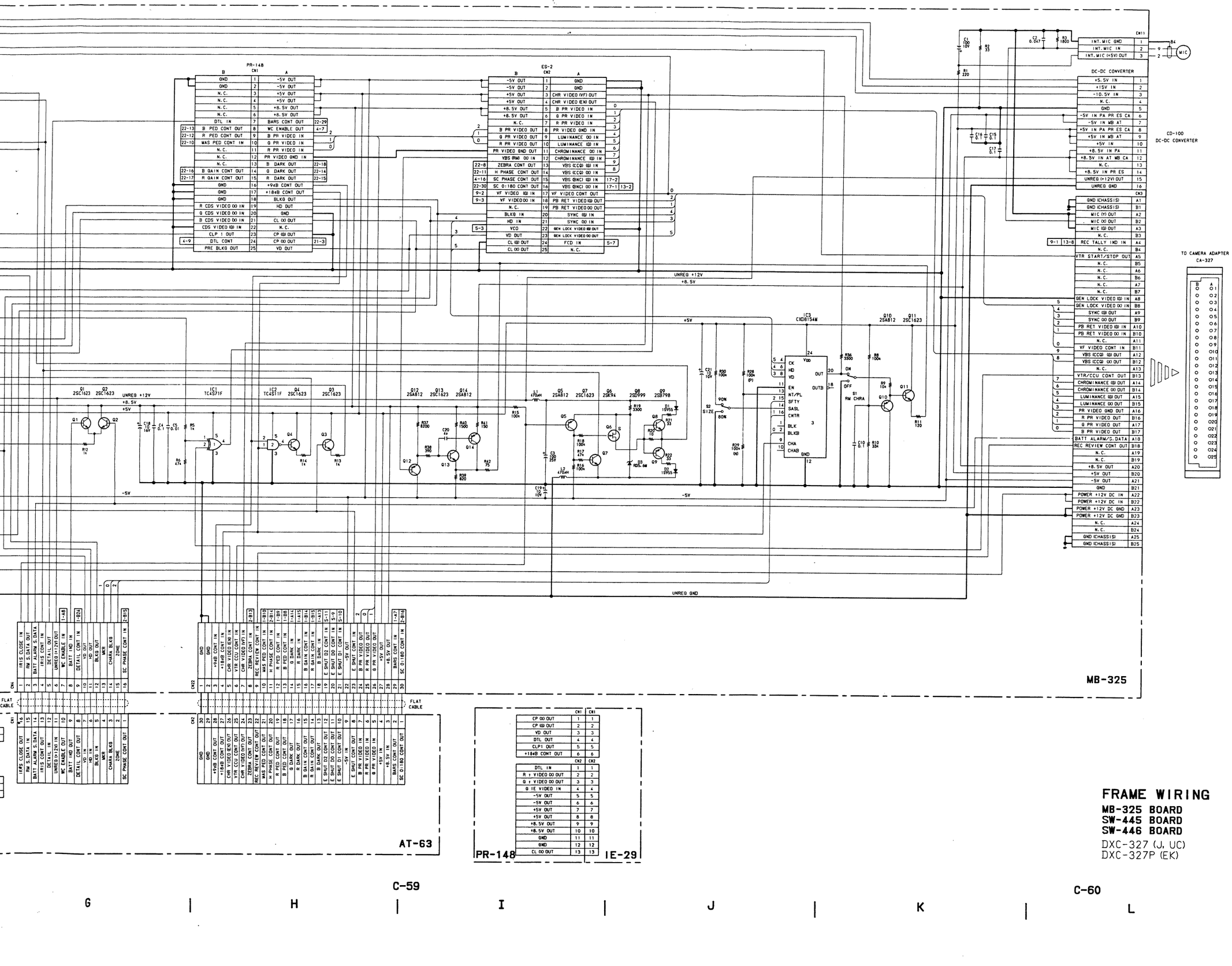
IC1 C-9
IC2 H-9
IC3 K-2

Q1 I-10
Q2 I-10
Q3 G-9
Q4 H-9
Q5 F-9
Q6 F-10
Q7 F-10
Q8 G-10
Q9 G-10
Q10 J-5
Q11 K-6
Q12 J-8
Q13 I-9
Q14 I-9

S1 J-5
S2 J-7

FRAME
MB-325 BOARD
SW-445 BOARD
SW-446 BOARD



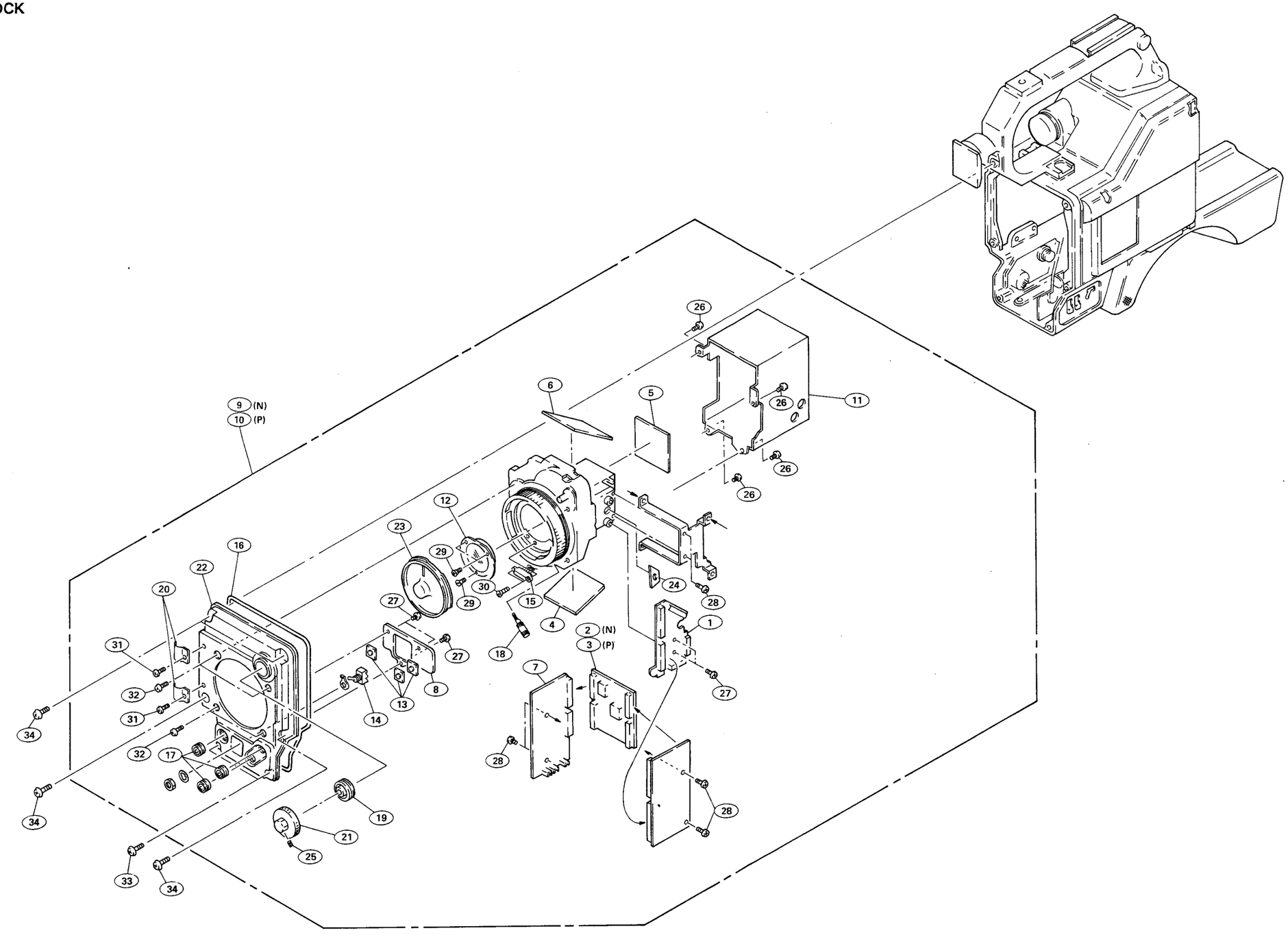


FRAME WIRING

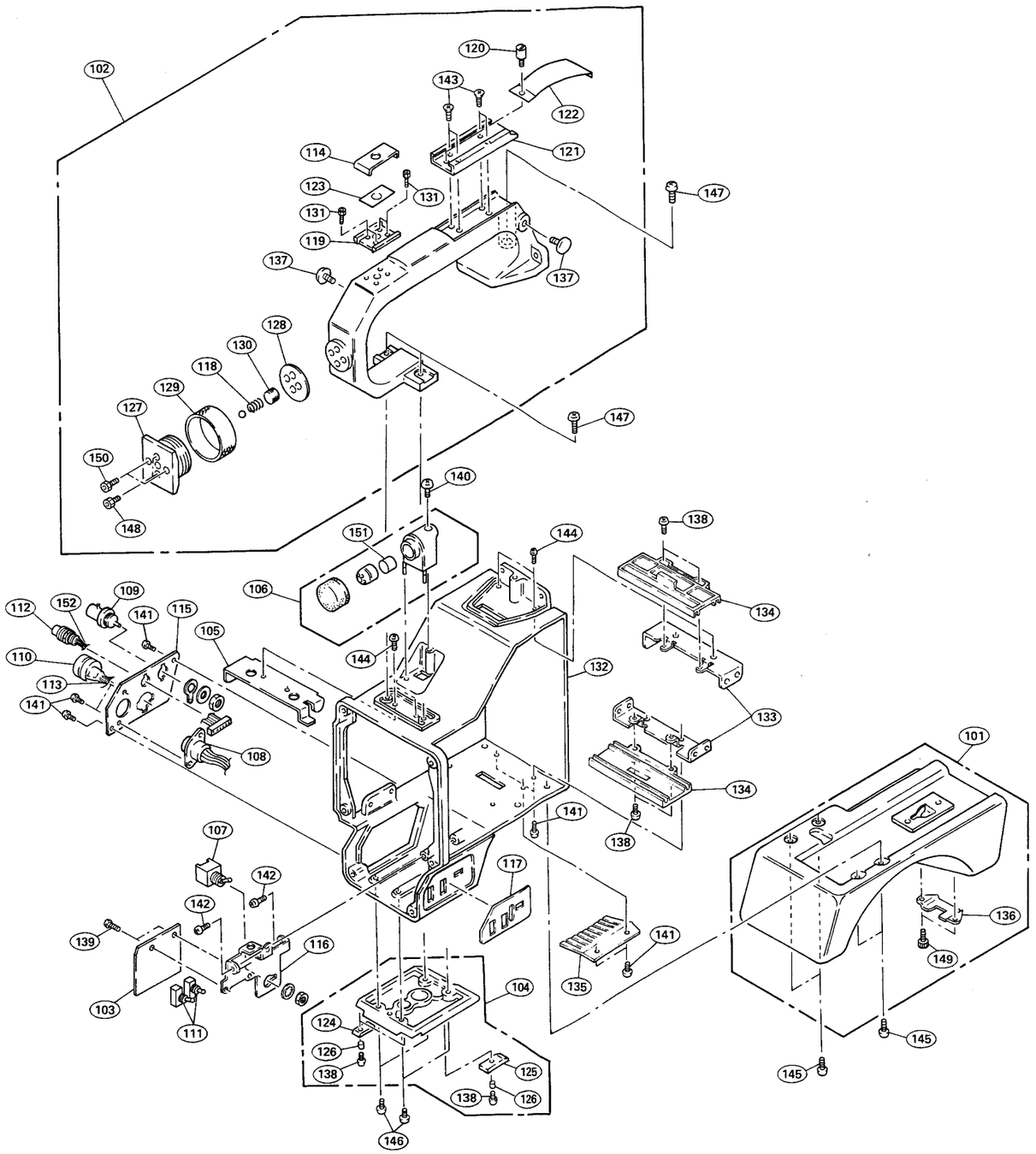
MB-325 BOARD
SW-445 BOARD
SW-446 BOARD

DXC-327 (J, UC)
DXC-327P (EK)

CCD BLOCK


26
6
5
9 (N)
10 (P)
11
26
26
26
12
23
29
30
29
15
16
22
20
27
24
28
4
2 (N)
3 (P)
1
18
31
32
31
32
17
34
34
14
13
8
27
27
7
28
28
19
21
25
33
34

CHASSIS (1) BLOCK



No.	Part No.	SP	Description
1	⚠ 1-546-078-11	s	CRT/DY ASSY
2	1-589-128-11	o	MAIN BOARD (for DXF-501)
3	1-589-128-21	o	MAIN BOARD (for DXF-501CE)
4	1-589-129-11	o	SW BOARD (for DXF-501)
5	1-589-129-21	o	SW BOARD (for DXF-501CE)
6	2-277-453-00	s	KNOB, CONTROL
7	2-277-456-00	s	COLLER, STOPPER
8	2-277-457-00	s	KNOB, STOPPER
9	2-277-466-01	s	SPRING, COMPRESSION
10	2-277-468-01	o	PLATE, ORNAMENTAL, CAMERA, SHOE
11	2-381-461-02	s	PIN, BLIND
12	2-381-462-01	s	PIN
13	2-381-468-01	s	PIN, STOPPER
14	2-381-472-02	o	STOPPER
16	2-832-007-00	s	BUSHING (K), INSULATING
17	3-657-700-00	s	BRACKET, ACCESSORY
18	3-672-213-01	o	SHEET, ADHESIVE
19	3-680-604-01	o	PLATE, BLIND
20	3-680-605-00	o	CAP, SLIDE
21	3-688-709-01	s	NUT, PLATE, SHOE
24	3-703-037-00	s	INSULATOR, TO-220
25	7-621-255-25	s	SCREW +P2X4
26	7-621-255-52	s	SCREW +P2X8
27	7-621-773-95	s	SCREW +B2.6X6
28	7-621-775-00	s	SCREW +B2.6X3
29	7-624-102-04	s	STOP RING, TYPE E
31	7-627-552-58	s	SCREW, PRECISION +P1.7X5
32	7-627-553-28	s	SCREW, PRECISION +P2X2.5
33	7-627-553-68	s	SCREW, PRECISION +P2X6
34	7-682-248-09	s	SCREW +K3X8
35	7-682-550-09	s	SCREW +B3X12
36	7-685-131-19	s	SCREW +BTP2.6X4
37	7-688-008-04	s	WASHER
38	8-729-385-82	s	TRANSISTOR 2SB858
39	9-994-797-01	s	CABLE, VF
40	9-994-811-01	o	SPRING, PLATE
41	9-994-812-01	o	INSULATOR
42	9-994-813-01	o	LABEL, SWITCH
43	9-994-814-01	o	CASE, BOTTOM
44	9-994-815-01	o	HOLDER T, OUTSIDE
45	9-994-816-01	o	PLATE, NUT
46	9-994-817-01	o	MOLT
47	9-994-818-01	o	HOLDER B, OUTSIDE
48	9-994-819-01	o	PIN, LOCK
49	9-994-820-01	o	RING, SLIDE
50	9-994-821-01	o	NUT, PLATE, CASE
51	9-994-822-01	o	GUIDE, VF SLIDE
52	9-994-823-01	o	LABEL, SLIDE
53	9-994-824-01	o	STOPPER
54	9-994-825-01	o	RUBBER, STOPPER
55	9-994-826-01	o	STOPPER, PWB
56	9-994-827-01	o	COLLER
57	9-997-916-01	o	MIRROR
58	9-997-917-01	o	SPACER
59	9-997-918-01	o	RING, LOCK
60	9-997-919-01	o	HOLDER A, LENS
61	9-997-920-01	o	HOLDER B, LENS
62	9-997-921-01	o	RING, ADJUSTMENT
63	9-997-922-01	o	LID
64	9-997-923-01	s	EYECUP
65	9-997-924-01	o	RING, RUBBER
66	9-997-925-01	o	BALL, STEEL
67	3-680-417-01	s	LUPE B, VF
68	9-998-810-01	o	CASE, TOP
69	1-230-075-00	s	RES, VAR, METAL 2K "CONTR" "BRIGHT"
70	1-570-845-11	s	SWITCH, SLIDE "TALLY ON/OFF" "PEAKING ON/OFF"
71	9-994-802-01	s	DIODE SLH-56VT

Ref. No.	Part No.	SP	Description			
RESISTOR, CHIP						
1/10W						
0 - 3.3M (E12) +-5% 1/10W						
1-216-295-00		s	RES, CHIP	0	5%	1/10W
1-216-298-00		s	RES, CHIP	2.2	5%	1/10W
1-216-302-00		s	RES, CHIP	2.7	5%	1/10W
1-216-304-00		s	RES, CHIP	3.3	5%	1/10W
1-216-306-00		s	RES, CHIP	3.9	5%	1/10W
1-216-308-00		s	RES, CHIP	4.7	5%	1/10W
1-216-309-00		s	RES, CHIP	5.6	5%	1/10W
1-216-311-00		s	RES, CHIP	6.8	5%	1/10W
1-216-313-00		s	RES, CHIP	8.2	5%	1/10W
1-216-001-00		s	RES, CHIP	10	5%	1/10W
1-216-003-00		s	RES, CHIP	12	5%	1/10W
1-216-005-00		s	RES, CHIP	15	5%	1/10W
1-216-007-00		s	RES, CHIP	18	5%	1/10W
1-216-009-00		s	RES, CHIP	22	5%	1/10W
1-216-011-00		s	RES, CHIP	27	5%	1/10W
1-216-013-00		s	RES, CHIP	33	5%	1/10W
1-216-015-00		s	RES, CHIP	39	5%	1/10W
1-216-017-00		s	RES, CHIP	47	5%	1/10W
1-216-019-00		s	RES, CHIP	56	5%	1/10W
1-216-021-00		s	RES, CHIP	68	5%	1/10W
1-216-023-00		s	RES, CHIP	82	5%	1/10W
1-216-025-00		s	RES, CHIP	100	5%	1/10W
1-216-027-00		s	RES, CHIP	120	5%	1/10W
1-216-029-00		s	RES, CHIP	150	5%	1/10W
1-216-031-00		s	RES, CHIP	180	5%	1/10W
1-216-033-00		s	RES, CHIP	220	5%	1/10W
1-216-035-00		s	RES, CHIP	270	5%	1/10W
1-216-037-00		s	RES, CHIP	330	5%	1/10W
1-216-039-00		s	RES, CHIP	390	5%	1/10W
1-216-041-00		s	RES, CHIP	470	5%	1/10W
1-216-043-00		s	RES, CHIP	560	5%	1/10W
1-216-045-00		s	RES, CHIP	680	5%	1/10W
1-216-047-00		s	RES, CHIP	820	5%	1/10W
1-216-049-00		s	RES, CHIP	1k	5%	1/10W
1-216-051-00		s	RES, CHIP	1.2k	5%	1/10W
1-216-053-00		s	RES, CHIP	1.5k	5%	1/10W
1-216-055-00		s	RES, CHIP	1.8k	5%	1/10W
1-216-057-00		s	RES, CHIP	2.2k	5%	1/10W
1-216-059-00		s	RES, CHIP	2.7k	5%	1/10W
1-216-061-00		s	RES, CHIP	3.3k	5%	1/10W
1-216-063-00		s	RES, CHIP	3.9k	5%	1/10W
1-216-065-00		s	RES, CHIP	4.7k	5%	1/10W
1-216-067-00		s	RES, CHIP	5.6k	5%	1/10W
1-216-069-00		s	RES, CHIP	6.8k	5%	1/10W
1-216-071-00		s	RES, CHIP	8.2k	5%	1/10W
1-216-073-00		s	RES, CHIP	10k	5%	1/10W
1-216-075-00		s	RES, CHIP	12k	5%	1/10W
1-216-077-00		s	RES, CHIP	15k	5%	1/10W
1-216-079-00		s	RES, CHIP	18k	5%	1/10W
1-216-081-00		s	RES, CHIP	22k	5%	1/10W
1-216-083-00		s	RES, CHIP	27k	5%	1/10W
1-216-085-00		s	RES, CHIP	33k	5%	1/10W
1-216-087-00		s	RES, CHIP	39k	5%	1/10W
1-216-089-00		s	RES, CHIP	47k	5%	1/10W
1-216-091-00		s	RES, CHIP	56k	5%	1/10W
1-216-093-00		s	RES, CHIP	68k	5%	1/10W
1-216-095-00		s	RES, CHIP	82k	5%	1/10W
1-216-097-00		s	RES, CHIP	100k	5%	1/10W
1-216-099-00		s	RES, CHIP	120k	5%	1/10W
1-216-101-00		s	RES, CHIP	150k	5%	1/10W
1-216-103-00		s	RES, CHIP	180k	5%	1/10W
1-216-105-00		s	RES, CHIP	220k	5%	1/10W
1-216-107-00		s	RES, CHIP	270k	5%	1/10W
1-216-109-00		s	RES, CHIP	330k	5%	1/10W
1-216-111-00		s	RES, CHIP	390k	5%	1/10W
1-216-113-00		s	RES, CHIP	470k	5%	1/10W
1-216-115-00		s	RES, CHIP	560k	5%	1/10W
1-216-117-00		s	RES, CHIP	680k	5%	1/10W
1-216-119-00		s	RES, CHIP	820k	5%	1/10W
1-216-121-00		s	RES, CHIP	1.0M	5%	1/10W
1-216-123-00		s	RES, CHIP	1.2M	5%	1/10W
1-216-125-00		s	RES, CHIP	1.5M	5%	1/10W
1-216-127-00		s	RES, CHIP	1.8M	5%	1/10W
1-216-129-00		s	RES, CHIP	2.2M	5%	1/10W
1-216-131-00		s	RES, CHIP	2.7M	5%	1/10W
1-216-133-00		s	RES, CHIP	3.3M	5%	1/10W

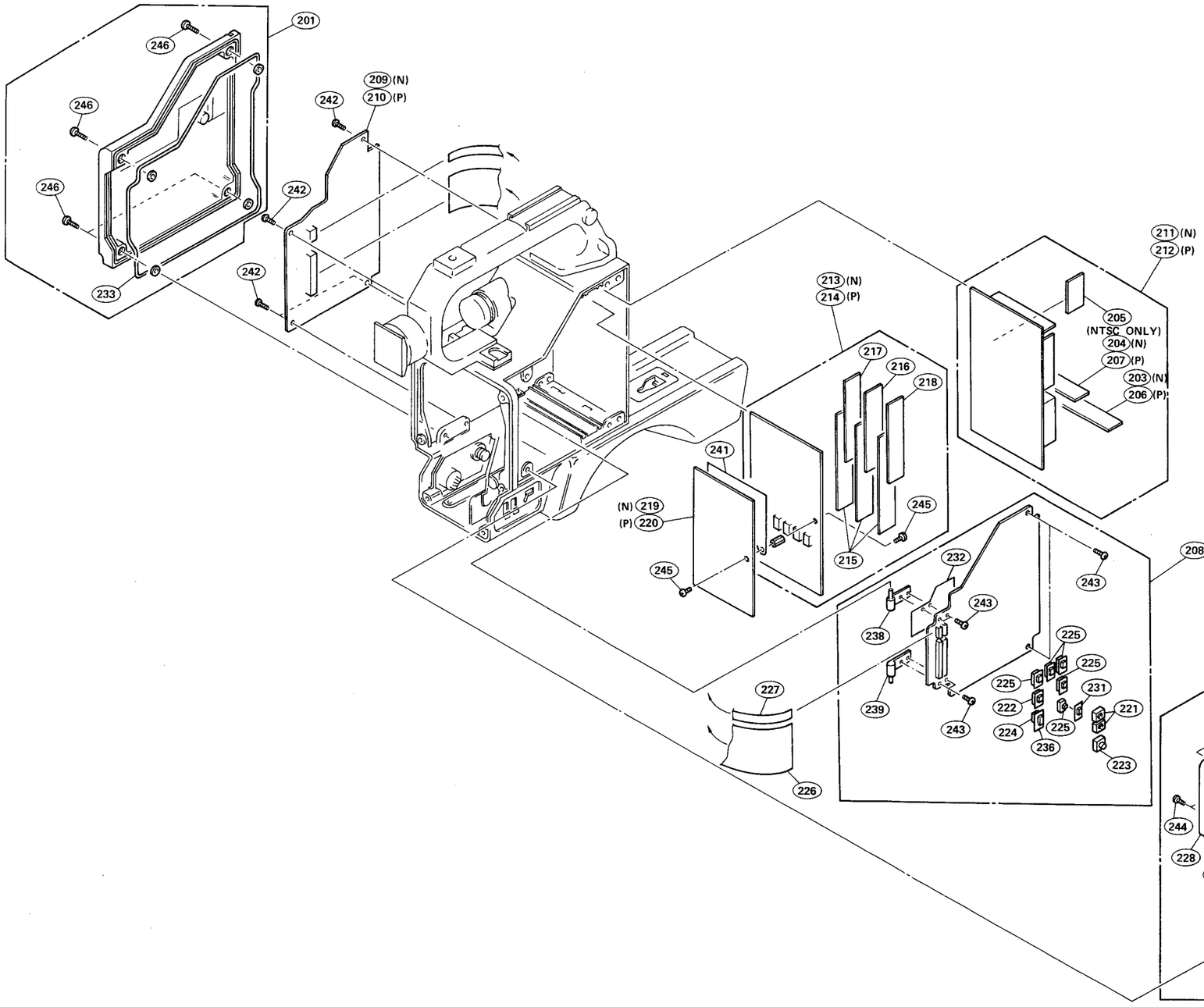
Ref. No.	Part No.	SP	Description
MAIN BOARD			
	1-589-128-11	o	MOUNTED CIRCUIT BOARD "MAIN"
	9-994-794-01	s	CRT
C20	9-994-781-01	s	TANTALUM 47 16V
C21	1-163-038-11	s	CHIP CERAMIC 0.1 25V
C22	1-163-038-11	s	CHIP CERAMIC 0.1 25V
C23	1-126-157-11	s	ELECT 10 20% 16V
C24	1-124-464-11	s	ELECT 0.22 20% 50V
C26	9-994-780-01	s	P-P CONDENCER 0.0047
C28	1-124-438-11	s	ELECT 1 20% 50V
C29	1-124-584-11	s	ELECT 100 20% 10V
C30	1-131-347-00	s	TANTALUM 1 10% 35V
C31	1-126-157-11	s	ELECT 10 20% 16V
C32	1-163-133-11	s	CHIP CERAMIC 470PF 5% 50V
C33	1-126-157-11	s	ELECT 10 20% 16V
C34	1-126-162-11	s	ELECT 3.3 20% 50V
C35	1-163-088-11	s	CHIP CERAMIC 0.1 25V
C36	1-124-455-00	s	ELECT 100 20% 16V
C37	9-994-777-01	s	ELECT 220 6.3V
C38	1-130-481-11	s	CAP,PE TEREPHTHALATE 0.0068 5% 50V
C40	1-163-088-11	s	CHIP CERAMIC 0.1 25V
C43	1-163-088-11	s	CHIP CERAMIC 0.1 25V
C44	9-994-782-01	s	TANTALUM 47 16V
C46	1-126-162-11	s	ELECT 3.3 20% 50V
C48	9-994-783-01	s	0.0056 100V
C49	9-994-778-01	s	ELECT 22 63V
C50	9-994-784-01	s	0.0015 1K
C51	1-163-088-11	s	CHIP CERAMIC 0.1 25V
C52	9-994-779-01	s	ELECT 56 16V
C53	1-163-088-11	s	CHIP CERAMIC 0.1 25V
C54	1-163-088-11	s	CHIP CERAMIC 0.1 25V
C55	1-163-088-11	s	CHIP CERAMIC 0.1 25V
CN4	9-994-791-01	o	RECEPTACLE, 7P
CN7	9-994-792-01	o	RECEPTACLE, 3P
CN8	9-994-793-01	o	RECEPTACLE, 2P
D2	8-719-914-42	s	DA204K
D4	8-719-911-19	s	1SS119
D5	9-994-773-01	s	ERA15-06
D6	9-994-774-01	s	1SS136
D7	8-719-948-45	s	ERA22-08

Ref. No.	Part No.	SP	Description
HLC	1-459-823-11	s	COIL,HORIZONTAL LINEARITY
IC2	8-759-300-28	s	HA11423MP: HITACHI
IC3	8-759-100-94	s	μPC358G2:
Q10	8-729-881-23	s	2SC2812-L7
Q11	8-729-881-23	s	2SC2812-L7
Q12	8-729-100-76	s	2SA812
Q20	8-729-881-23	s	2SC2812-L7
Q21	9-994-771-01	s	2SD1220
Q22	8-729-119-00	s	2SK612
Q23	8-729-162-43	s	2SB624-BV3
R43	⚠ 1-216-109-11	s	CHIP 330K 5% 1/10W
R44	⚠ 1-216-083-11	s	CHIP 27K 5% 1/10W
R60	⚠ 1-216-057-11	s	CHIP 2.2K 5% 1/10W
R61	⚠ 1-216-057-11	s	CHIP 2.2K 5% 1/10W
R66	⚠ 9-994-785-01	s	10M
R67	⚠ 9-994-786-01	s	91K
R69	⚠ 1-216-081-11	s	CHIP 22K 5% 1/10W
R70	⚠ 1-216-079-11	s	CHIP 18K 5% 1/10W
R72	⚠ 1-216-081-11	s	CHIP 22K 5% 1/10W
R73	⚠ 1-216-081-11	s	CHIP 22K 5% 1/10W
RV10	9-994-787-01	s	5K
RV11	9-994-788-01	s	5K
RV12	9-994-789-01	s	200
RV13	9-994-790-01	s	500
RV20	⚠ 1-228-459-11	s	METAL 10K
RV21	⚠ 1-228-458-11	s	METAL 5K
T1	⚠ 1-439-419-11	s	FBT

Ref. No.	Part No.	SP	Description
SW BOARD			
	1-589-129-11	o	MOUNTED CIRCUIT BOARD "SW" (J,UC)
	1-589-129-21	o	MOUNTED CIRCUIT BOARD "SW" (EK)
C1	1-124-438-11	s	ELECT 1 20% 50V
C3	1-124-584-11	s	ELECT 100 20% 10V
C4	1-124-584-11	s	ELECT 100 20% 10V
C5	1-126-154-11	s	ELECT 47 20% 6.3V
C6	1-124-438-11	s	ELECT 1 20% 50V
C7	1-124-462-11	s	ELECT 10 20% 16V
C8	1-163-113-11	s	CHIP CERAMIC 68PF 5% 50V
C9	1-163-105-11	s	CHIP CERAMIC 33PF 5% 50V
C10	1-163-015-11	s	CHIP CERAMIC 0.0033 10% 50V
C11	1-163-038-11	s	CHIP CERAMIC 0.1 25V
CN1	9-994-803-01	o	8P
CN2	9-994-804-01	o	3P
CN3	9-994-805-01	o	5P
CN4	9-994-806-01	o	7S
CN5	9-994-807-01	o	2P
CP	9-994-808-01	s	PROTECTORS ICP-N10(EK)
D1	8-719-914-43	s	DAN202K
IC1	⚠ 8-759-630-27	s	M5236ML: MITSUBISHI
L1	9-994-800-01	s	100μH
L2	9-994-801-01	s	47μH
LED1	9-994-802-01	s	SLH-56VT
Q2	8-729-881-23	s	2SC2812-L7
Q3	8-729-881-23	s	2SC2812-L7
Q4	8-729-881-23	s	2SC2812-L7
Q5	1-806-828-11	s	2SC2814
Q6	9-994-796-01	s	2SC3722K
Q7	9-994-796-01	s	2SC3722K
Q8	8-729-881-23	s	2SC2812-L7

Ref. No.	Part No.	SP	Description
R2	⚠ 9-994-799-01	s	CHIP 24K 5% 1/10W
R3	⚠ 1-216-064-11	s	CHIP 4.3K 5% 1/10W
RV1	⚠ 1-228-473-11	s	METAL 5K
RV2	1-230-075-11	s	CARBON 2K "CONTR"
RV3	1-228-475-11	s	METAL 20K
RV4	1-226-368-11	s	CARBON 10K "BRIGHT"
S1	1-570-845-11	s	SLIDE "PEAKING ON/OFF"
S2	1-570-845-11	s	SLIDE "TALLY ON/OFF"
LED BOARD			
	1-589-127-11	o	MAUNTED CIRCUIT BOARD "LED"
	9-994-810-01	o	LED PWB
CN9	9-994-809-01	o	RECEPTACLE, 5P
LED2	8-719-800-25	s	TLR109A
LED3	8-719-800-25	s	TLR109A
LED4	8-719-800-25	s	TLR109A
LED5	8-719-800-19	s	TLO102A
FRAME			
Q1	8-729-315-63	s	2SB856
PACKING MATERIAL AND ACCESSORIES			
	3-166-610-01	o	CARTON, INDIVIDUAL(UC)
	3-166-612-01	o	CARTON, INDIVIDUAL(EK)
	3-699-152-01	o	CUSHION, UPPER
	3-699-153-01	o	CUSHION, LOWER
	3-701-627-01	o	BAG, POLY

CHASSIS (2) BLOCK



PACKING MATERIAL AND ACCESSORIES

DXC-327H/327PH

Part. No. SP Description

3-166-614-01 o CARTON, INDIVIDUAL DXC-327H(UC)
3-166-615-01 o CARTON, INDIVIDUAL DXC-327PH(EK)
3-699-154-01 o CUSHION(LOWER)
3-699-157-01 o CUSHION(UPPER)
3-752-391-11 s MANUAL, INSTRUCTION(UC,EK)

3-759-391-31 s MANUAL, INSTRUCTION(UC,EK)
3-759-391-41 s MANUAL, INSTRUCTION(EK)
3-759-391-51 s MANUAL, INSTRUCTION(EK)
3-752-391-61 s MANUAL, INSTRUCTION(EK)
3-764-889-01 o CHART, ADJUSTMENT

DXC-327L/327PL

Part. No. SP Description

3-166-618-01 o CARTON, INDIVIDUAL DXC-327L(UC)
3-166-619-01 o CARTON, INDIVIDUAL DXC-327PL(EK)
3-701-630-01 o BAG, POLY
3-752-391-11 s MANUAL, INSTRUCTION DXC-327L(UC)
3-752-391-31 s MANUAL, INSTRUCTION DXC-327L(UC)

3-752-391-41 s MANUAL, INSTRUCTION DXC-327PL(EK)
3-752-391-51 s MANUAL, INSTRUCTION DXC-327PL(EK)
3-752-391-61 s MANUAL, INSTRUCTION DXC-327PL(EK)
3-764-889-01 o CHART, ADJUSTMENT

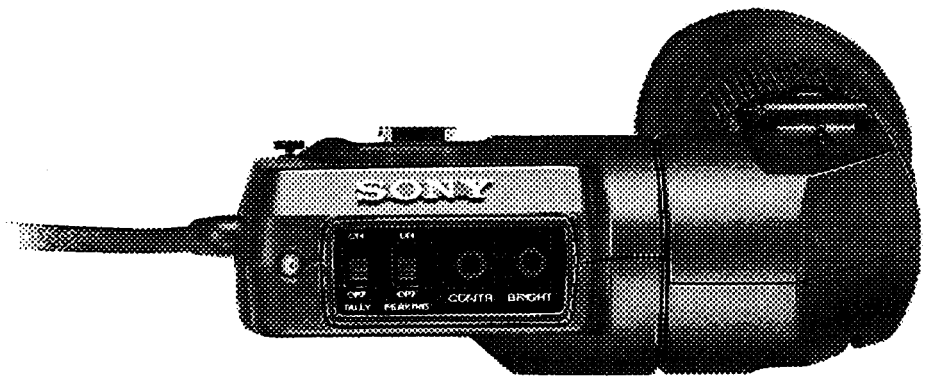
DXC-327K/327PK

Part. No. SP Description

3-166-616-01 o CARTON, INDIVIDUAL DXC-327K(UC)
3-166-617-01 o CARTON, INDIVIDUAL DXC-327PK(EK)
3-701-630-01 o BAG, POLY
3-752-391-11 s MANUAL, INSTRUCTION DXC-327K(UC)/DXC-327PK(EK)
3-752-391-31 s MANUAL, INSTRUCTION DXC-327K(UC)/DXC-327PK(EK)

3-752-391-41 s MANUAL, INSTRUCTION DXC-327PK(EK)
3-752-391-51 s MANUAL, INSTRUCTION DXC-327PK(EK)
3-752-391-61 s MANUAL, INSTRUCTION DXC-327PK(EK)
3-764-889-01 o CHART, ADJUSTMENT
7-682-560-09 s SCREW +B4x6
7-682-563-09 s SCREW +B4x12

1.5INCH ELECTRONIC VIEWFINDER



SPECIFICATIONS

Picture tube	1.5-inch monochrome
Indicators	REC/TALLY indicator
	BATT indicator
	SHUTTER indicator
	GAIN UP indicator
Resolution	400 lines
Power requirements	
	12 V DC
Power consumption	
	2.3 W
Weight	Approx. 500 g (1 lb 2 oz)
Dimensions	Approx. 182 × 68 × 205 mm (w/h/d)
Supplied accessory	
	Operating Instructions (1)

Design and specifications are subject to change without notice.

SONY®

SERVICE MANUAL

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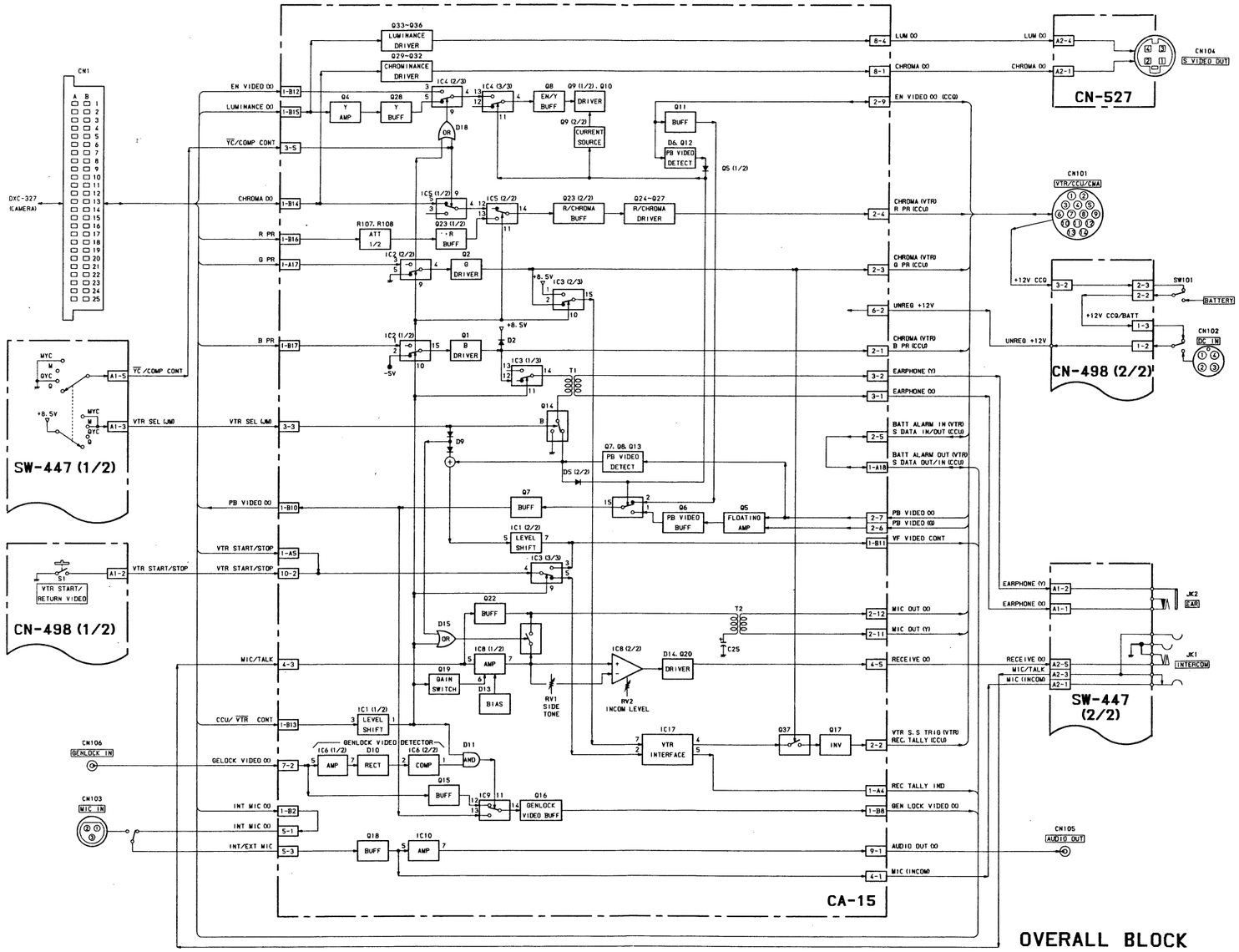
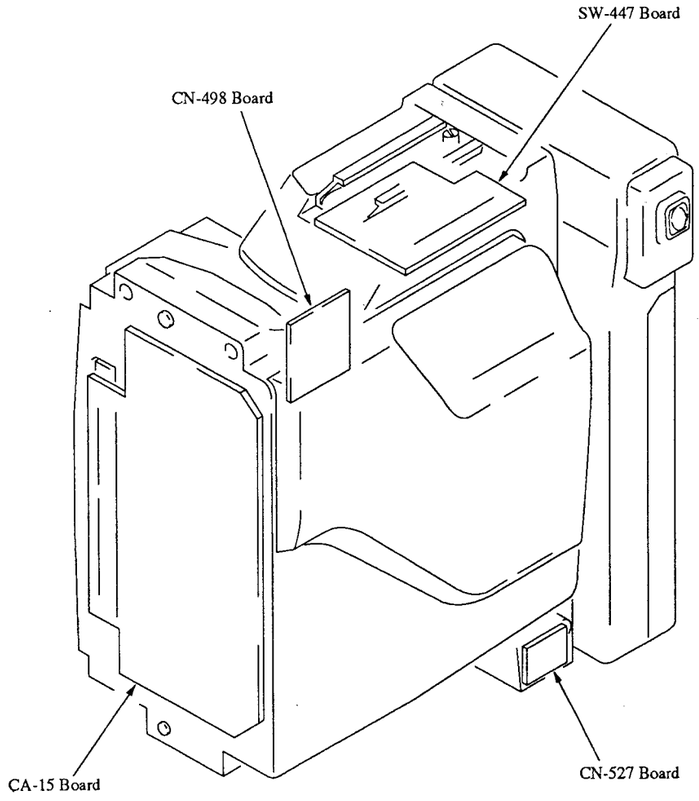
SECTION A
BLOCK DIAGRAM

OVERALL BLOCK



OVERALL BLOCK

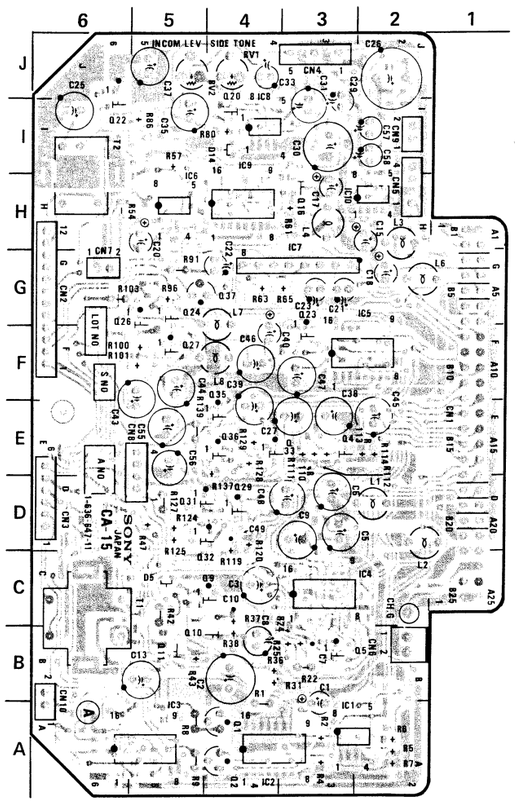
SECTION C
SCHEMATIC DIAGRAMS AND BOARD ILLUSTRATIONS



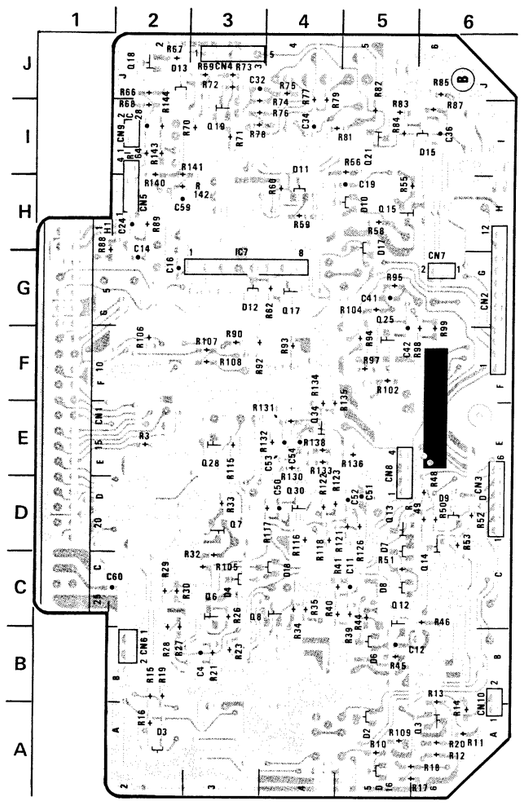
CA-15 BOARD

CA-15 (1-636-647-11)

CN1	E-1	Q27	F-5
CN2	G-6	Q28	E-3
CN3	D-6	Q29	D-4
CN4	J-3	Q30	D-4
CN5	H-2	Q31	D-5
CN6	B-2	Q32	C-4
CN7	G-6	Q33	E-3
CN8	E-5	Q34	E-4
CN9	I-2	Q35	F-4
CN10	A-6	Q36	E-4
		Q37	G-4
D2	A-5		
D3	A-2	RV1	J-4
D4	C-3	RV2	J-4
D5	C-5		
D6	B-5	T1	C-5
D7	D-5	T2	I-6
D8	C-5		
D9	D-6		
D10	H-5		
D11	I-4		
D12	G-3		
D13	J-2		
D14	I-4		
D15	I-6		
D16	A-5		
D17	H-5		
D18	C-4		
IC1	A-3		
IC2	A-4		
IC3	A-5		
IC4	C-2		
IC5	G-2		
IC6	H-5		
IC7	G-3		
IC8	J-4		
IC9	I-4		
IC10	H-3		
Q1	A-4		
Q2	A-4		
Q3	A-6		
Q4	E-3		
Q5	B-2		
Q6	C-3		
Q7	D-3		
Q8	C-3		
Q9	C-4		
Q10	B-5		
Q11	B-5		
Q12	C-5		
Q13	D-5		
Q14	C-6		
Q15	H-5		
Q16	H-3		
Q17	G-4		
Q18	J-2		
Q19	I-3		
Q20	J-4		
Q21	I-5		
Q22	I-6		
Q23	G-3		
Q24	G-5		
Q25	G-5		
Q26	G-6		



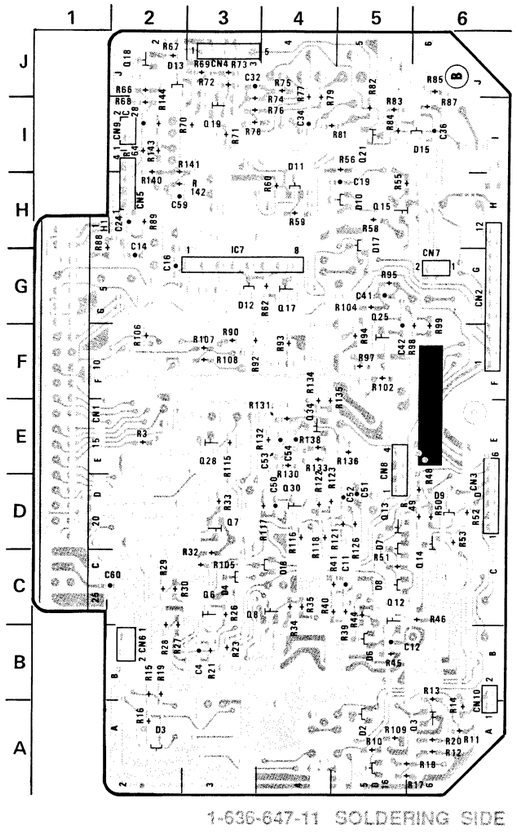
1-636-647-11 COMPONENT SIDE



1-636-647-11 SOLDERING SIDE

CA-15 (1-636-647-11)

CN1	E-1	Q27	F-5
CN2	G-6	Q28	E-3
CN3	D-6	Q29	D-4
CN4	J-3	Q30	D-4
CN5	H-2	Q31	D-5
CN6	B-2	Q32	C-4
CN7	G-6	Q33	E-3
CN8	E-5	Q34	E-4
CN9	I-2	Q35	F-4
CN10	A-6	Q36	E-4
		Q37	G-4
D2	A-5		
D3	A-2	RV1	J-4
D4	C-3	RV2	J-4
D5	C-5		
D6	B-5	T1	C-5
D7	D-5	T2	I-6
D8	C-5		
D9	D-6		
D10	H-5		
D11	I-4		
D12	G-3		
D13	J-2		
D14	I-4		
D15	I-6		
D16	A-5		
D17	H-5		
D18	C-4		
IC1	A-3		
IC2	A-4		
IC3	A-5		
IC4	C-2		
IC5	G-2		
IC6	H-5		
IC7	G-3		
IC8	J-4		
IC9	I-4		
IC10	H-3		
Q1	A-4		
Q2	A-4		
Q3	A-6		
Q4	E-3		
Q5	B-2		
Q6	C-3		
Q7	D-3		
Q8	C-3		
Q9	C-4		
Q10	B-5		
Q11	B-5		
Q12	C-5		
Q13	D-5		
Q14	C-6		
Q15	H-5		
Q16	H-3		
Q17	G-4		
Q18	J-2		
Q19	I-3		
Q20	J-4		
Q21	I-5		
Q22	I-6		
Q23	G-3		
Q24	G-5		
Q25	G-5		
Q26	G-6		

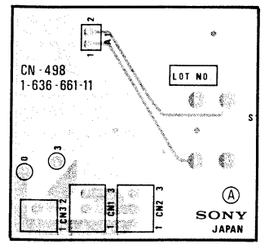


1-636-647-11 SOLDERING SIDE

CA-15 (1-636-647-11)

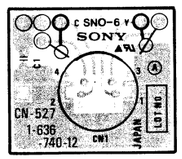
CN1	E-1	Q27	F-5
CN2	G-6	Q28	E-3
CN3	D-6	Q29	D-4
CN4	J-3	Q30	D-4
CN5	H-2	Q31	D-5
CN6	B-2	Q32	C-4
CN7	G-6	Q33	E-3
CN8	E-5	Q34	E-4
CN9	I-2	Q35	F-4
CN10	A-6	Q36	E-4
		Q37	G-4
D2	A-5		
D3	A-2	RV1	J-4
D4	C-3	RV2	J-4
D5	C-5		
D6	B-5	T1	C-5
D7	D-5	T2	I-6
D8	C-5		
D9	D-6		
D10	H-5		
D11	I-4		
D12	G-3		
D13	J-2		
D14	I-4		
D15	I-6		
D16	A-5		
D17	H-5		
D18	C-4		
IC1	A-3		
IC2	A-4		
IC3	A-5		
IC4	C-2		
IC5	G-2		
IC6	H-5		
IC7	G-3		
IC8	J-4		
IC9	I-4		
IC10	H-3		
Q1	A-4		
Q2	A-4		
Q3	A-6		
Q4	E-3		
Q5	B-2		
Q6	C-3		
Q7	D-3		
Q8	C-3		
Q9	C-4		
Q10	B-5		
Q11	B-5		
Q12	C-5		
Q13	D-5		
Q14	C-6		
Q15	H-5		
Q16	H-3		
Q17	G-4		
Q18	J-2		
Q19	I-3		
Q20	J-4		
Q21	I-5		
Q22	I-6		
Q23	G-3		
Q24	G-5		
Q25	G-5		
Q26	G-6		

CN-498 BOARD



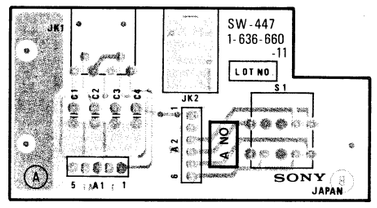
1-636-661-11 COMPONENT SIDE

CN-527 BOARD



1-636-740-12 COMPONENT SIDE

SW-447 BOARD

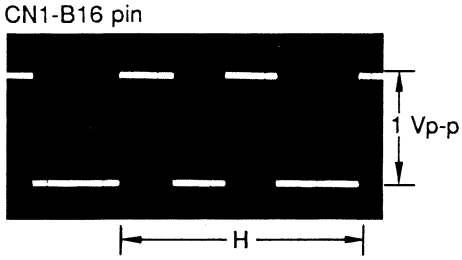


1-636-660-11 COMPONENT SIDE

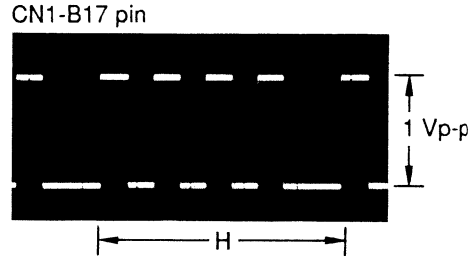
CA-15 BOARD

NOTE:
1. All voltage are DC, measured with a digital voltmeter.
2. All waveforms are taken and DC voltage is measured in condition below.
   - Shoot the grayscale chart. Adjust lens iris so that a white level is 100 IRE on the waveform monitor.
   - GAIN : 0 dB
   - WHITE BAL : PRE
   - ABL : OFF
   - SHUTTER : OFF
   - ZEBRA : OFF
   - VF MARKER : OFF
   - PHASE : 0°
   - BARS : ON

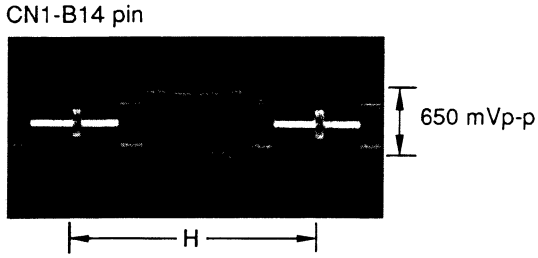
CN1-B16 pin



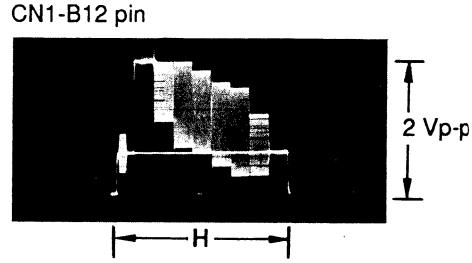
CN1-B17 pin



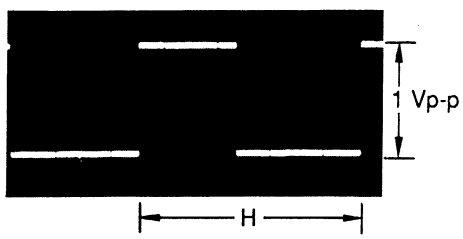
CN1-B14 pin



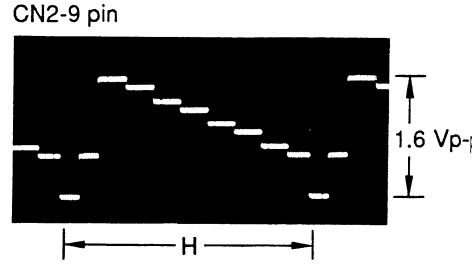
CN1-B12 pin



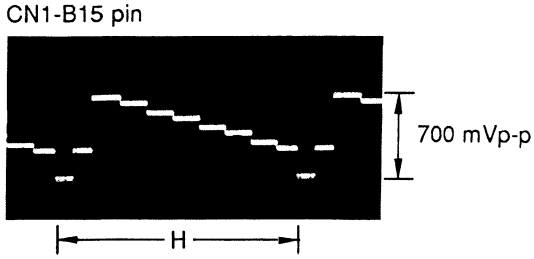
CN1-A17 pin



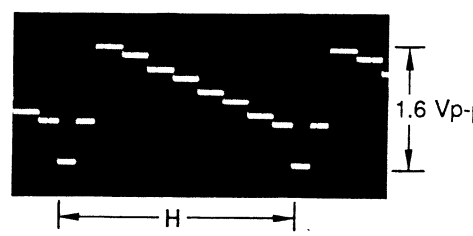
CN2-9 pin



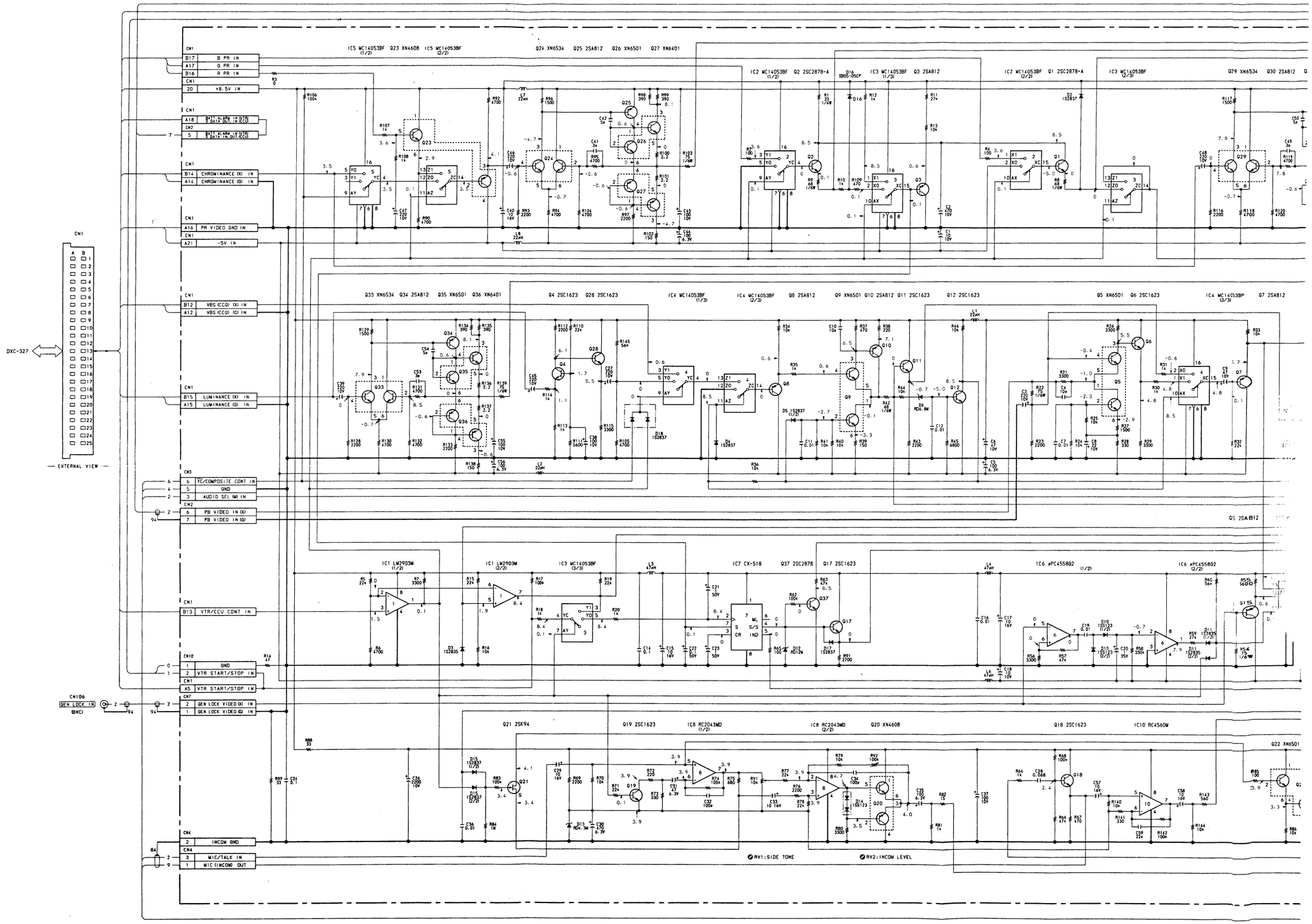
CN1-B15 pin



Q28-emitter



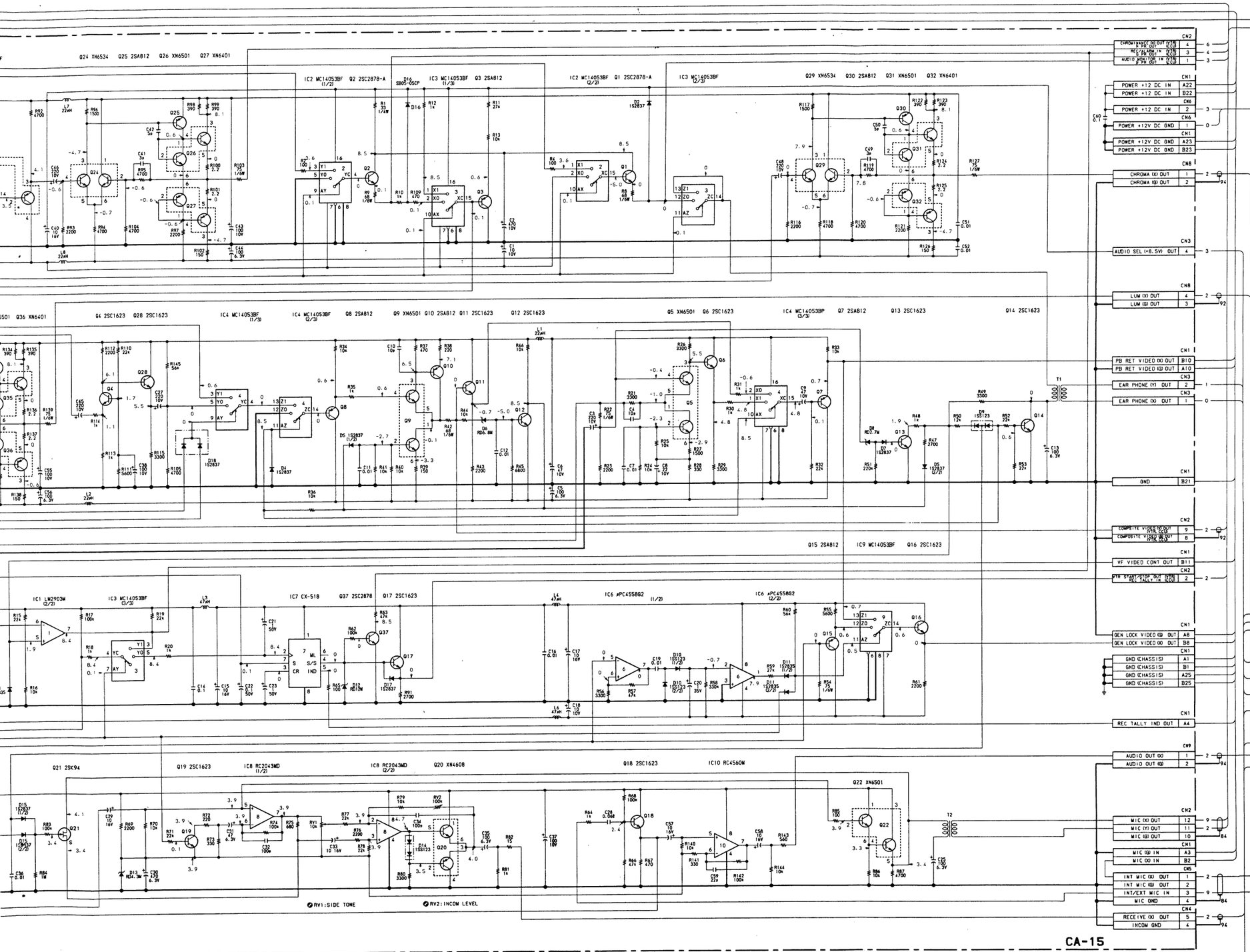
CA-15 BOARD
CN-498 BOARD
CN-527 BOARD
SW-447 BOARD



CA-327 (J, UC)
CA-327P (EK)

C-9 C-10

A | B | C | D | E | F | G



FRAME WIRING
CA-15 BOARD
CN-498 BOARD
CN-527 BOARD
SW-447 BOARD

CA-327 (J, UC)
CA-327P (EK)

C-10 C-11

B-CA327-FRAME/M

SECTION D
SPARE PARTS

PARTS INFORMATION

1. **Safety Related Component Warning**

   Components indentified by shading marked with ⚠ on the schematic diagrams, exploded views and electrical spare parts list are critical to safe operation. Replace these components with Sony parts whose parts numbers appear as shown in this manual or in service manual supplements published by Sony.

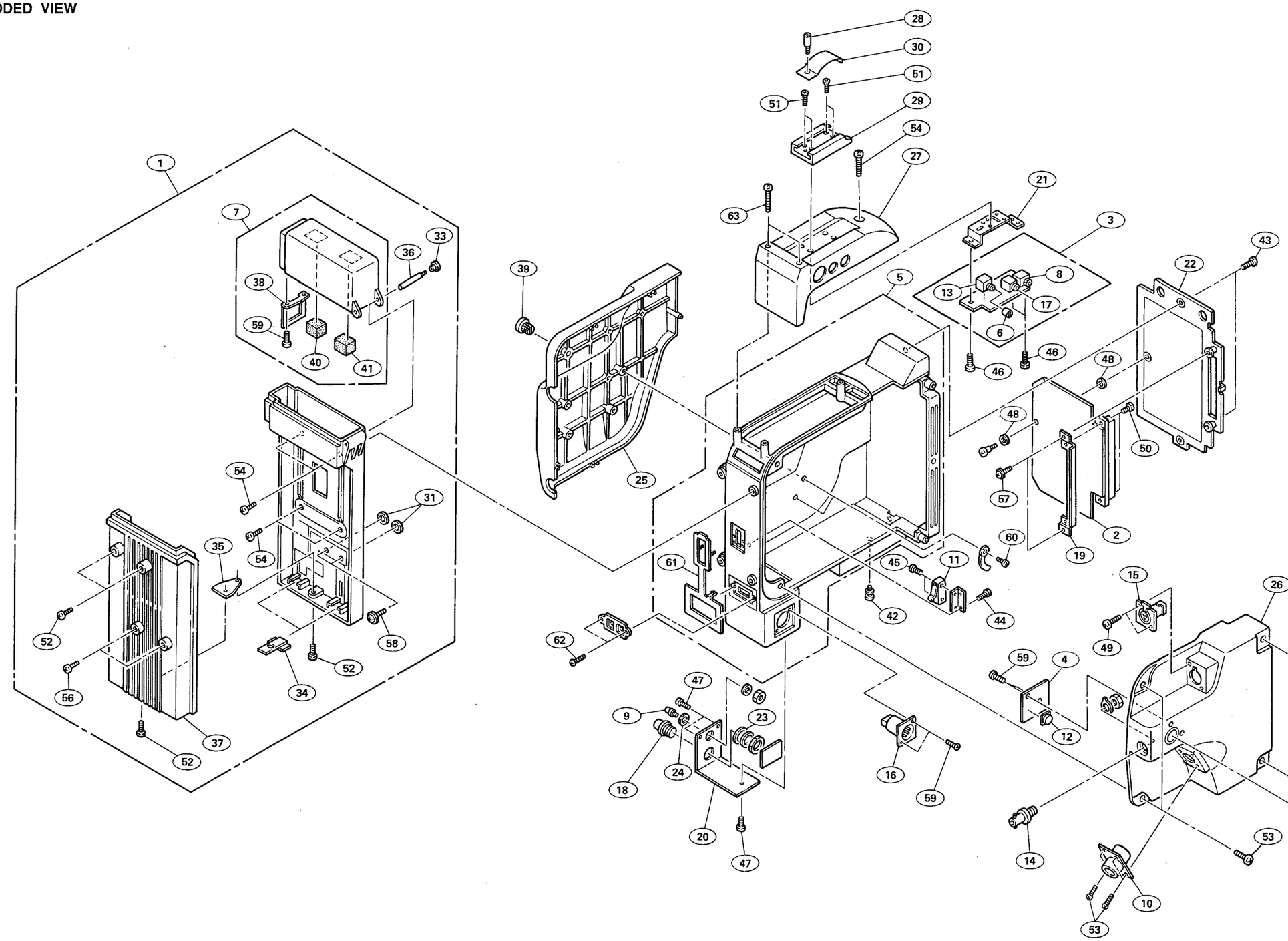
2. Replacement Parts supplied from Sony Parts Center will sometimes have different shape and outside view from the parts which actually in use. This is due to **"accommodating the improved parts and/or engineering changes" or "standardization of genuine parts."** This manual 's exploded view and electrical spare parts lists are indicating the parts numbers of "the standardized genuine parts at present." Regarding engineering parts and diagrams changes in our engineering department, refer to SONY service bulletins and service manual supplements.

3. The parts marked with "S" in the SP column of the exploded views and electrical spare parts list are normally required for routine service work. Orders for parts marked with "O" will be processed, but allow for additional delivery time.

4. Item with no parts number and/or no description are not stocked because they are seldom required for routine service.

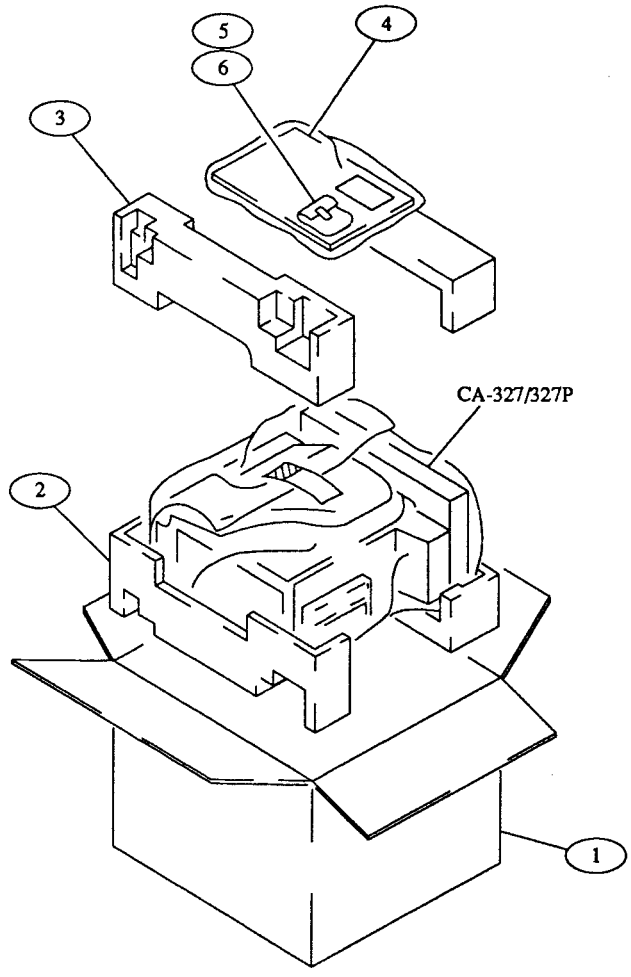
5. All capacitors are in micro farads unless otherwise specified.
   All inductors are in micro henries unless otherwise specified.
   All resistors are in ohms.

EXPLODED VIEW



No.	Part No.	SP	Description
1	A-6703-651-C	s	CASE ASSY, BATTERY
2	A-7515-231-A	o	MOUNTED CIRCUIT BOARD, CA-15
3	A-7520-518-A	o	MOUNTED CIRCUIT BOARD, SW-447
4	A-7520-519-A	o	MOUNTED CIRCUIT BOARD, CN-498
5	X-3165-587-1	o	CHASSIS ASSY, CA
6	X-3664-208-0	s	KNOB ASSY, FADE
7	X-3717-701-3	o	COVER ASSY, TOP, BATTERY
8	1-507-883-11	s	JACK, SMALL TYPE, 4P "INTER COM"
9	1-507-918-00	o	JACK, PIN 1P "AUDIO OUT"
10	1-508-942-12	s	CONNECTOR, 14P MALE "VTR/CCU/CMA"
11	1-552-665-00	s	SWITCH, MICRO
12	1-553-739-21	s	SWITCH, KEY BOARD
13	1-554-955-11	s	SWITCH, ROTARY "VTR"
14	1-561-781-11	s	CONNECTOR, BNC "GENLOCK IN"
15	1-563-096-11	s	CONNECTOR (WITH SW), 3P FEMALE "MIC IN"
16	1-564-603-11	s	CONNECTOR (WITH DC SW), 4P MALE "DC IN"
17	1-566-740-11	s	JACK "EAR"
18	1-568-699-11	s	SOCKET, MINIATURE 4P "S VIDEO OUT"
19	3-166-318-01	o	BRACKET, CONNECTOR
20	3-166-319-01	o	PLATE (A), BOTTOM
21	3-166-329-01	o	BRACKET, PC BOARD
22	3-166-330-01	o	PANEL, CONNECTOR
23	3-167-448-01	o	PLATE, GROUND
24	3-167-449-01	o	INSULATOR (1)
25	3-167-450-01	o	PAD, SIDE
26	3-168-373-01	o	COVER, SIDE
27	3-168-436-01	o	COVER, TOP
28	3-664-213-00	o	SCREW, STOPPER
29	3-664-218-00	o	SHOE
30	3-664-228-00	o	PLATE, SPRING
31	3-669-596-00	s	WASHER (2.3), STOPPER
32	3-672-221-02	s	PACKING, CONTROL
33	3-703-075-00	s	CAP 2, SHAFT
34	3-717-707-02	o	CUSHION (2)
35	3-717-708-01	o	RETAINER, CASE
36	3-717-709-01	o	SHAFT, LID
37	3-718-040-01	o	COVER (1), BATTERY CASE
38	3-718-172-01	o	RETAINER, HOOK
39	3-725-907-01	s	BUSHING, BLIND
40	3-729-720-01	o	CUSHION (LEFT)
41	3-729-721-01	o	CUSHION (RIGHT)
42	3-744-355-01	o	SHAFT, GUIDE
43	7-621-770-67	s	SCREW +B 2.6X6
44	7-621-772-18	s	SCREW +B 2X4
45	7-621-772-48	s	SCREW +B 2X8
46	7-621-773-86	s	SCREW +B 2.6X4
47	7-621-775-10	s	SCREW +B 2.6X4
48	7-623-925-11	s	WASHER 4.0, NYLONE
49	7-627-556-77	s	SCREW, PRECISION +P2.6X6 TYPE 1
50	7-628-254-20	s	SCREW +PS 2.6X8
51	7-682-248-04	s	SCREW +K 3X8
52	7-682-546-09	s	SCREW +B 3X5
53	7-682-548-04	s	SCREW +B 3X8
54	7-682-548-09	s	SCREW +B 3X8
55	7-682-553-09	s	SCREW +B 3X20
56	7-682-559-09	s	SCREW +B 4X5
57	7-682-947-01	s	SCREW +PSW 3X6
58	7-682-948-01	s	SCREW +PSW 3X8
59	7-685-133-19	s	SCREW +P 2.6X6 TYPE1
60	7-685-649-79	s	SCREW +BTP 3X14 TYPE2 N-S
61	3-168-435-01	o	PACKING, DROP PROTECTION
62	7-621-772-30	s	SCREW +B 2X6
63	7-682-553-09	s	SCREW +B 3X12

No.	Part No.	SP	DESCRIPTION
1	3-167-618-01	o	CARTON, INDIVIDUAL(UC)
	3-167-620-01	o	CARTON, INDIVIDUAL(EK)1
2	3-167-622-01	o	CUSHION(LOWER)
3	3-167-623-01	o	CUSHION(UPPER)
4	3-752-392-11	s	MANUAL, INSTRUCTION
5	7-682-560-09	s	SCREW +B4x6
6	7-682-563-09	s	SCREW +B4x12



RESISTOR, CHIP

Part No.	SP	Description
1-216-295-00	s	RES, CHIP 0 5% 1/10W
1-216-298-00	s	RES, CHIP 2.2 5% 1/10W
1-216-302-00	s	RES, CHIP 2.7 5% 1/10W
1-216-304-11	s	RES, CHIP 3.3 5% 1/10W
1-216-306-11	s	RES, CHIP 3.9 5% 1/10W
1-216-308-00	s	RES, CHIP 4.7 5% 1/10W
1-216-309-00	s	RES, CHIP 5.6 5% 1/10W
1-216-311-00	s	RES, CHIP 6.8 5% 1/10W
1-216-313-00	s	RES, CHIP 8.2 5% 1/10W
1-216-001-00	s	RES, CHIP 10 5% 1/10W
1-216-003-11	s	RES, CHIP 12 5% 1/10W
1-216-005-00	s	RES, CHIP 15 5% 1/10W
1-216-007-00	s	RES, CHIP 18 5% 1/10W
1-216-009-00	s	RES, CHIP 22 5% 1/10W
1-216-011-00	s	RES, CHIP 27 5% 1/10W
1-216-013-00	s	RES, CHIP 33 5% 1/10W
1-216-015-00	s	RES, CHIP 39 5% 1/10W
1-216-017-00	s	RES, CHIP 47 5% 1/10W
1-216-019-00	s	RES, CHIP 56 5% 1/10W
1-216-021-00	s	RES, CHIP 68 5% 1/10W
1-216-023-00	s	RES, CHIP 82 5% 1/10W
1-216-025-00	s	RES, CHIP 100 5% 1/10W
1-216-027-00	s	RES, CHIP 120 5% 1/10W
1-216-029-00	s	RES, CHIP 150 5% 1/10W
1-216-031-00	s	RES, CHIP 180 5% 1/10W
1-216-033-00	s	RES, CHIP 220 5% 1/10W
1-216-035-00	s	RES, CHIP 270 5% 1/10W
1-216-037-00	s	RES, CHIP 330 5% 1/10W
1-216-039-00	s	RES, CHIP 390 5% 1/10W
1-216-041-00	s	RES, CHIP 470 5% 1/10W
1-216-043-00	s	RES, CHIP 560 5% 1/10W
1-216-045-00	s	RES, CHIP 680 5% 1/10W
1-216-047-00	s	RES, CHIP 820 5% 1/10W
1-216-049-00	s	RES, CHIP 1k 5% 1/10W
1-216-051-00	s	RES, CHIP 1.2k 5% 1/10W
1-216-053-00	s	RES, CHIP 1.5k 5% 1/10W
1-216-055-00	s	RES, CHIP 1.8k 5% 1/10W
1-216-057-00	s	RES, CHIP 2.2k 5% 1/10W
1-216-059-00	s	RES, CHIP 2.7k 5% 1/10W
1-216-061-00	s	RES, CHIP 3.3k 5% 1/10W
1-216-063-00	s	RES, CHIP 3.9k 5% 1/10W
1-216-065-00	s	RES, CHIP 4.7k 5% 1/10W
1-216-067-00	s	RES, CHIP 5.6k 5% 1/10W
1-216-069-00	s	RES, CHIP 6.8k 5% 1/10W
1-216-071-00	s	RES, CHIP 8.2k 5% 1/10W
1-216-073-00	s	RES, CHIP 10k 5% 1/10W
1-216-075-00	s	RES, CHIP 12k 5% 1/10W
1-216-077-00	s	RES, CHIP 15k 5% 1/10W
1-216-079-00	s	RES, CHIP 18k 5% 1/10W
1-216-081-00	s	RES, CHIP 22k 5% 1/10W
1-216-083-00	s	RES, CHIP 27k 5% 1/10W
1-216-085-00	s	RES, CHIP 33k 5% 1/10W
1-216-748-11	s	RES, CHIP 39k 5% 1/10W
1-216-089-00	s	RES, CHIP 47k 5% 1/10W
1-216-091-00	s	RES, CHIP 56k 5% 1/10W

RESISTOR, CHIP

Part No.	SP	Description
1-216-093-00	s	RES, CHIP 68k 5% 1/10W
1-216-095-00	s	RES, CHIP 82k 5% 1/10W
1-216-097-00	s	RES, CHIP 100k 5% 1/10W
1-216-099-00	s	RES, CHIP 120k 5% 1/10W
1-216-101-00	s	RES, CHIP 150k 5% 1/10W
1-216-103-00	s	RES, CHIP 180k 5% 1/10W
1-216-105-00	s	RES, CHIP 220k 5% 1/10W
1-216-107-00	s	RES, CHIP 270k 5% 1/10W
1-216-109-00	s	RES, CHIP 330k 5% 1/10W
1-216-111-00	s	RES, CHIP 390k 5% 1/10W
1-216-113-00	s	RES, CHIP 470k 5% 1/10W
1-216-115-00	s	RES, CHIP 560k 5% 1/10W
1-216-117-00	s	RES, CHIP 680k 5% 1/10W
1-216-119-00	s	RES, CHIP 820k 5% 1/10W
1-216-121-00	s	RES, CHIP 1.0M 5% 1/10W
1-216-123-11	s	RES, CHIP 1.2M 5% 1/10W
1-216-125-00	s	RES, CHIP 1.5M 5% 1/10W
1-216-127-11	s	RES, CHIP 1.8M 5% 1/10W
1-216-129-00	s	RES, CHIP 2.2M 5% 1/10W
1-216-131-11	s	RES, CHIP 2.7M 5% 1/10W
1-216-133-00	s	RES, CHIP 3.3M 5% 1/10W

CA-15 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-7515-231-A	o	MOUNTED CIRCUIT BOARD "CA-15"
C1	1-131-377-00	s	TANTALUM 10uF 10% 10V
C2	1-124-472-11	s	ELECT 470uF 20% 10V
C3	1-126-176-11	s	ELECT 220uF 20% 10V
C4	1-163-227-11	s	CERAMIC 10PF 5% 50V
C5	1-124-584-00	s	ELECT 100uF 20% 10V
C6	1-124-589-11	s	ELECT 47uF 20% 10V
C7	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
C8	1-124-638-11	s	ELECT 22uF 20% 6.3V
C9	1-124-589-11	s	ELECT 47uF 20% 10V
C10	1-163-227-11	s	CERAMIC 10PF 5% 50V
C11	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
C12	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
C13	1-124-584-00	s	ELECT 100uF 20% 10V
C14	1-163-038-00	s	CERAMIC CHIP 0.1uF 25V
C15	1-131-365-00	s	TANTALUM 10uF 10% 16V
C16	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
C17	1-131-365-00	s	TANTALUM 10uF 10% 16V
C18	1-131-377-00	s	TANTALUM 10uF 10% 10V
C19	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
C20	1-131-347-00	s	TANTALUM 1uF 10% 35V
C21	1-126-301-11	s	ELECT 1uF 20% 50V
C22	1-124-463-00	s	ELECT 0.1uF 20% 50V
C23	1-126-301-11	s	ELECT 1uF 20% 50V
C24	1-163-038-00	s	CERAMIC CHIP 0.1uF 25V
C25	1-124-584-00	s	ELECT 100uF 20% 10V
C26	1-124-893-11	s	ELECT 2200uF 20% 6.3V
C27	1-126-176-11	s	ELECT 220uF 20% 10V
C28	1-163-036-00	s	CERAMIC CHIP 0.068uF 50V
C29	1-126-157-11	s	ELECT 10uF 20% 16V
C30	1-124-472-11	s	ELECT 470uF 20% 10V
C31	1-126-154-11	s	ELECT 47uF 20% 6.3V
C32	1-163-251-11	s	CERAMIC 100PF 5% 50V
C33	1-126-157-11	s	ELECT 10uF 20% 16V
C34	1-163-251-11	s	CERAMIC 100PF 5% 50V
C35	1-124-584-00	s	ELECT 100uF 20% 10V
C36	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
C37	1-124-584-00	s	ELECT 100uF 20% 10V
C38	1-124-584-00	s	ELECT 100uF 20% 10V
C39	1-126-176-11	s	ELECT 220uF 20% 10V
C40	1-131-365-00	s	TANTALUM 10uF 10% 16V
C41	1-163-086-00	s	CERAMIC CHIP 3PF 0.25PF 50V
C42	1-163-088-00	s	CERAMIC CHIP 5PF 0.25PF 50V
C43	1-124-584-00	s	ELECT 100uF 20% 10V
C44	1-124-584-00	s	ELECT 100uF 20% 10V
C45	1-126-176-11	s	ELECT 220uF 20% 10V
C46	1-126-176-11	s	ELECT 220uF 20% 10V
C47	1-126-176-11	s	ELECT 220uF 20% 10V
C48	1-126-176-11	s	ELECT 220uF 20% 10V
C49	1-163-086-00	s	CERAMIC CHIP 3PF 0.25PF 50V
C50	1-163-088-00	s	CERAMIC CHIP 5PF 0.25PF 50V
C51	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
C52	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
C53	1-163-086-00	s	CERAMIC CHIP 3PF 0.25PF 50V
C54	1-163-088-00	s	CERAMIC CHIP 5PF 0.25PF 50V
C55	1-124-584-00	s	ELECT 100uF 20% 10V
C56	1-124-584-00	s	ELECT 100uF 20% 10V
C57	1-126-157-11	s	ELECT 10uF 20% 16V

(CA-15 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C58	1-126-157-11	s	ELECT 10uF 20% 16V
C59	1-163-235-11	s	CERAMIC 22PF 5% 50V
CN1	1-566-581-11	o	CONNECTOR, MULTI 50P
CN2	1-506-477-11	o	CONNECTOR, 12P, MALE
	1-569-205-11	o	PLUG HOUSING, 12P
	1-569-191-11	o	TERMINAL, SOLDERLESS
	1-569-193-11	o	CONTACT
CN3	1-506-471-11	o	CONNECTOR, 6P, MALE
CN4	1-506-470-11	o	CONNECTOR, 5P, MALE
CN5	1-506-469-11	o	CONNECTOR, 4P, MALE
	1-569-197-11	o	PLUG HOUSING, 4P
	1-569-191-11	o	TERMINAL, SOLDERLESS
	1-569-193-11	o	CONTACT
CN6	1-560-356-00	o	CONNECTOR POST HEADER, ILG (2P)
CN7	1-506-467-11	o	CONNECTOR, 2P, MALE
	1-569-195-11	s	HOUSING, CONNECTOR 2P
	1-569-191-11	o	TERMINAL, SOLDERLESS
	1-569-193-11	o	CONTACT
CN8	1-506-469-11	o	CONNECTOR, 4P, MALE
CN9	1-564-467-11	o	CONNECTOR, 2P, MALE
	1-569-195-11	s	HOUSING, CONNECTOR 2P
	1-569-191-11	o	TERMINAL, SOLDERLESS
	1-569-193-11	o	CONTACT
CN10	1-506-467-11	o	CONNECTOR, 2P, MALE
D2	8-719-104-31	s	DIODE 1S2838
D3	8-719-104-34	s	DIODE 1S2836
D4	8-719-104-31	s	DIODE 1S2838
D5	8-719-104-31	s	DIODE 1S2838
D6	8-719-106-16	s	DIODE RD6.8M-B1
D7	8-719-104-34	s	DIODE 1S2836
D8	8-719-105-32	s	DIODE RD2.7M-B2
D9	8-719-800-76	s	DIODE 1SS226
D10	8-719-800-76	s	DIODE 1SS226
D11	8-719-104-34	s	DIODE 1S2836
D12	8-719-106-70	s	DIODE RD12M-B1
D13	8-719-105-63	s	DIODE RD4.3M-B1
D14	8-719-800-76	s	DIODE 1SS226
D15	8-719-104-31	s	DIODE 1S2838
D16	8-719-938-75	s	SB05-05CP
D17	8-719-104-31	s	DIODE 1S2838
D18	8-719-104-31	s	DIODE 1S2838
IC1	8-759-981-65	s	IC LM2903M
IC2	8-759-300-71	s	IC MC14053BF
IC3	8-759-300-71	s	IC MC14053BF
IC4	8-759-300-71	s	IC MC14053BF
IC5	8-759-300-71	s	IC MC14053BF
IC6	8-759-100-96	s	IC UPC4558G2
IC7	8-759-605-18	s	IC CX518
IC8	8-759-981-58	s	IC RC2043MD
IC9	8-759-300-71	s	IC MC14053BF
IC10	8-759-981-99	s	IC RC4560M
L1	1-408-413-00	s	MICRO 22uH
L2	1-408-413-00	s	MICRO 22uH
L3	1-410-478-11	s	47uH
L4	1-410-478-11	s	47uH
L6	1-410-478-11	s	47uH

(CA-15 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
L7	1-408-413-00	s	MICRO 22uH
L8	1-408-413-00	s	MICRO 22uH
Q1	8-729-201-05	s	TRANSISTER 2SC2878-B
Q2	8-729-201-05	s	TRANSISTER 2SC2878-B
Q3	8-729-216-22	s	TRANSISTOR 2SA1162
Q4	8-729-100-66	s	TRANSISTOR 2SC1623
Q5	8-729-402-19	s	TRANSISTOR XN6501
Q6	8-729-100-66	s	TRANSISTOR 2SC1623
Q7	8-729-216-22	s	TRANSISTOR 2SA1162
Q8	8-729-216-22	s	TRANSISTOR 2SA1162
Q9	8-729-402-19	s	TRANSISTOR XN6501
Q10	8-729-216-22	s	TRANSISTOR 2SA1162
Q11	8-729-100-66	s	TRANSISTOR 2SC1623
Q12	8-729-100-66	s	TRANSISTOR 2SC1623
Q13	8-729-100-66	s	TRANSISTOR 2SC1623
Q14	8-729-100-66	s	TRANSISTOR 2SC1623
Q15	8-729-216-22	s	TRANSISTOR 2SA1162
Q16	8-729-100-66	s	TRANSISTOR 2SC1623
Q17	8-729-100-66	s	TRANSISTOR 2SC1623
Q18	8-729-100-66	s	TRANSISTOR 2SC1623
Q19	8-729-100-66	s	TRANSISTOR 2SC1623
Q20	8-729-402-84	s	TRANSISTER XN4601
Q21	8-729-109-41	s	TRANSISTOR 2SK94-X1
Q22	8-729-402-19	s	TRANSISTOR XN6501
Q23	8-729-402-84	s	TRANSISTER XN4601
Q24	8-729-403-32	s	TRANSISTOR XN6534
Q25	8-729-216-22	s	TRANSISTOR 2SA1162
Q26	8-729-402-19	s	TRANSISTOR XN6501
Q27	8-729-402-78	s	TRANSISTOR XN6401
Q28	8-729-100-66	s	TRANSISTOR 2SC1623
Q29	8-729-403-32	s	TRANSISTOR XN6534
Q30	8-729-216-22	s	TRANSISTOR 2SA1162
Q31	8-729-402-19	s	TRANSISTOR XN6501
Q32	8-729-402-78	s	TRANSISTOR XN6401
Q33	8-729-403-32	s	TRANSISTOR XN6534
Q34	8-729-216-22	s	TRANSISTOR 2SA1162
Q35	8-729-402-19	s	TRANSISTOR XN6501
Q36	8-729-402-78	s	TRANSISTOR XN6401
Q37	8-729-201-05	s	TRANSISTER 2SC2878-B
R1	1-249-399-11	s	CARBON 33 5% 1/4W
R8	1-215-393-00	s	METAL 68 1% 1/6W
R9	1-215-393-00	s	METAL 68 1% 1/6W
R22	1-215-394-00	s	METAL 75 1% 1/6W
R42	1-215-393-00	s	METAL 68 1% 1/6W
R54	1-215-394-00	s	METAL 75 1% 1/6W
R91	1-215-431-00	s	METAL 2.7K 1% 1/6W
R95	1-216-667-11	s	METAL CHIP 4.7K 0.50% 1/10W
R103	1-215-394-00	s	METAL 75 1% 1/6W
R104	1-216-667-11	s	METAL CHIP 4.7K 0.50% 1/10W
R119	1-216-667-11	s	METAL CHIP 4.7K 0.50% 1/10W
R120	1-216-667-11	s	METAL CHIP 4.7K 0.50% 1/10W
R127	1-215-394-00	s	METAL 75 1% 1/6W
R131	1-216-667-11	s	METAL CHIP 4.7K 0.50% 1/10W
R132	1-216-667-11	s	METAL CHIP 4.7K 0.50% 1/10W
R139	1-215-394-00	s	METAL 75 1% 1/6W
RV1	1-226-703-11	s	RES, ADJ, METAL 10K
RV2	1-226-775-11	s	RES, ADJ, METAL 100K

(CA-15 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
T1	1-427-270-XX	s	TRANSFORMER, OUTPUT
T2	1-427-487-00	s	TRANSFORMER, OUTPUT

CN-498 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-7520-519-A	o	MOUNTED CIRCUIT BOARD "CN-498"
CN1	1-506-702-11	o	CONNECTOR, ILG 3P,
	1-561-515-00	o	HOUSING, ILG 3P FEMALE
	1-560-372-00	o	CONTACT, AWG22-28
CN2	1-506-702-11	o	CONNECTOR, ILG 3P,
	1-561-515-00	o	HOUSING, ILG 3P FEMALE
	1-560-372-00	o	CONTACT, AWG22-28
CN3	1-560-356-00	o	CONNECTOR POST HEADER, ILG (2P) MAL
	1-561-514-00	o	HOUSING, ILG 2P FEMALE
	1-560-372-00	o	CONTACT, AWG22-28
CN6	1-561-514-00	o	HOUSING, ILG 2P FEMALE
	1-560-372-00	o	CONTACT, AWG22-28
CN10	1-569-195-11	s	HOUSING, CONNECTOR 2P
	1-562-735-11	o	HOUSING, 2P
	1-564-831-11	o	CONTACT
	1-569-193-11	o	CONTACT
S1	1-553-739-21	s	SWITCH, PUSH

CN-527 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-636-740-12	o	PRINTED CIRCUIT BOARD "CN-527"
CN8	1-569-197-11	o	HOUSING, CONNECTER 4P
	1-569-191-11	o	CONTACT
	1-569-193-11	o	CONTACT

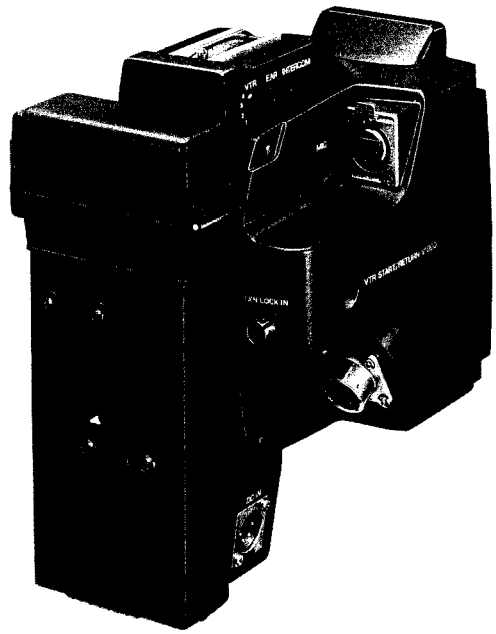
SW-447 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-7520-518-A	o	MOUNTED CIRCUIT BOARD "SW-447"
C1	1-161-051-00	s	CERAMIC 0.01uF 10% 25V
C2	1-161-051-00	s	CERAMIC 0.01uF 10% 25V
C3	1-161-051-00	s	CERAMIC 0.01uF 10% 25V
C4	1-161-051-00	s	CERAMIC 0.01uF 10% 25V
CN3	1-569-199-11	o	PLUG HOUSING, 6P
	1-562-739-11	o	HOUSING, CONNECTOR 6P
	1-564-831-11	o	CONTACT
	1-569-193-11	o	CONTACT
CN4	1-569-198-11	o	PLUG HOUSING, 5P
	1-562-738-11	o	HOUSING, 5P
	1-564-831-11	o	CONTACT
	1-569-191-11	o	TERMINAL, SOLDERLESS
	1-569-193-11	o	CONTACT
JK1	1-507-883-00	s	JACK, SMALL TYPE 4P
JK2	1-566-740-11	s	JACK
S1	1-554-955-11	s	SWITCH, ROTARY "VTR"

FRAME

Ref. No. or Q'ty	Part No.	SP	Description
C1001	1-161-051-00	s	CERAMIC 0.01uF 10% 25V
C1002	1-161-051-00	s	CERAMIC 0.01uF 10% 25V
CN101	1-508-942-00	s	RECEPTACLE, 14P MAIL "VTR/CCU/CMA"
CN102	1-564-603-11	s	CONNECTOR WITH DC SW, 4P, MALE
CN103	1-563-096-11	s	RECEPTACLE, 3P FEMAIL(WITH SW) "MIC IN"
CN104	1-568-699-11	s	SOCKET, MINIATURE(ROUND) 4P "S VIDEO OUT"
CN105	1-507-918-00	o	JACK, 1P "AUDIO OUT"
CN106	1-561-781-11	s	CONNECTOR, BNC, FEMALE
R1001	1-247-826-00	s	CARBON 620 5% 1/4W
SW101	1-552-665-00	s	SWITCH, MICRO

CAMERA ADAPTOR



SPECIFICATIONS

Inputs/Outputs	VTR/CCU/CMA connector: Sony Q-type, 14-pin
	DC IN: XLR-type, 4-pin
	MIC IN: XLR-type, 3-pin
	GEN LOCK IN: BNC-type
	EAR: mini jack
	INTERCOM: mini intercom jack
	S VIDEO OUT: mini DIN-type, 4-pin
	AUDIO OUT: phono jack
Power requirements	12 V DC
Power consumption	0.8 W
Operating temperature	–5°C to +45°C (23°F to 113°F)
Storage temperature	–20°C to +60°C (–4°F to +140°F)
Weight	1.2 kg (2 lb 10 oz)
Dimensions	118 × 205 × 187 mm ($4^3/_4 \times 8^1/_3 \times 7^3/_8$ inches)
Supplied accessories	Screws for attaching the CA-327/327P
	M4 × 6 (2)
	M4 × 12 (2)
	Operating instructions (1)

Design and specifications are subject to change without notice.

SONY®

SERVICE MANUAL

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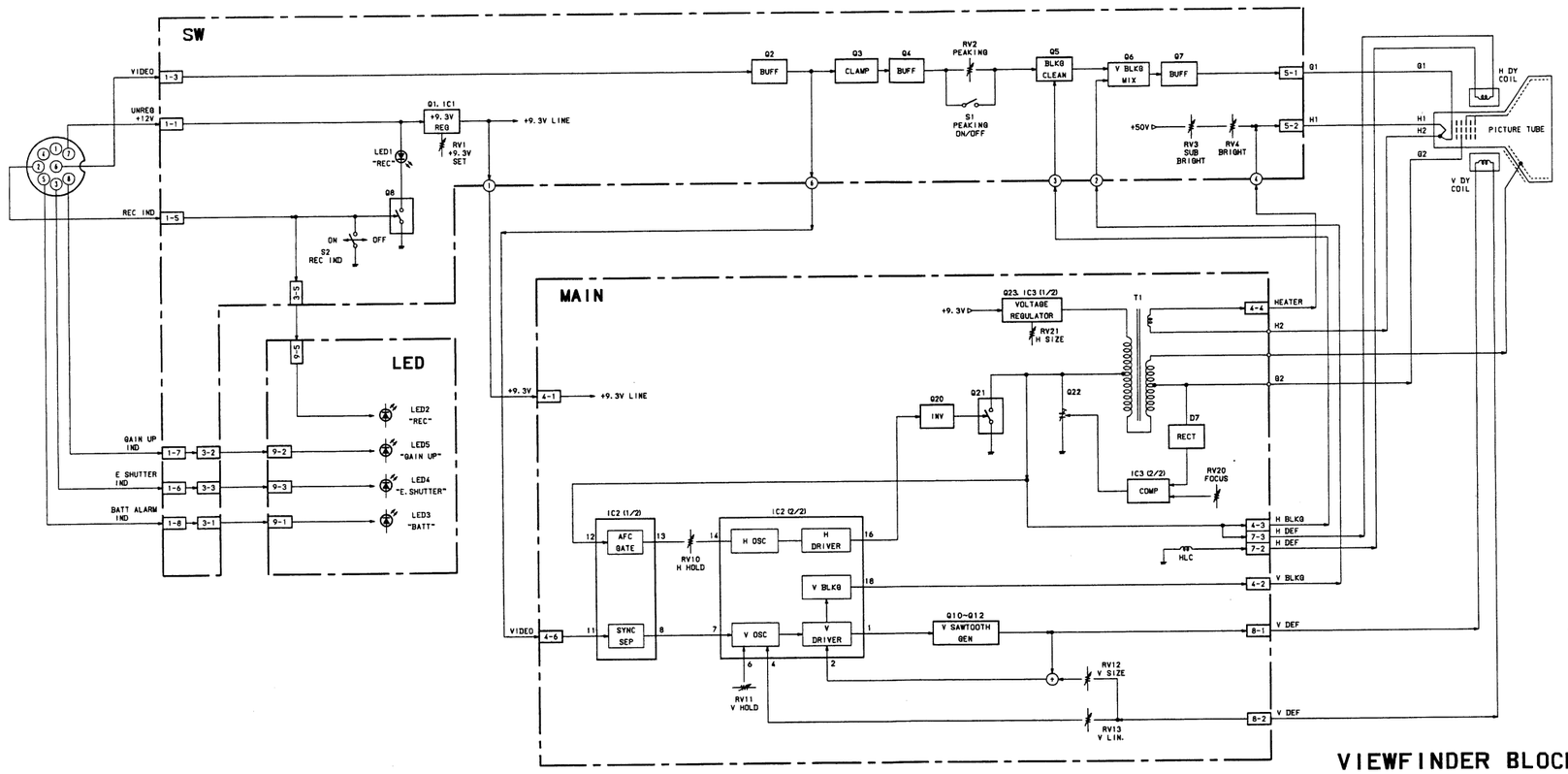
SECTION A
BLOCK DIAGRAM



VIEWFINDER BLOCK

SECTION B
SEMICONDUCTOR

The circuit diagram of IC is obtained from the IC data book published by the manufacturer.

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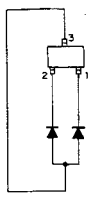
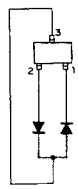
DIODE, TRANSISTOR

(SCALE 4/1) TOP VIEW



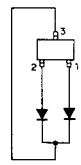
1S2836

(SCALE 4/1) TOP VIEW



1SS226

(SCALE 4/1) TOP VIEW



MA152WK

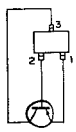
(SCALE 4/1) TOP VIEW

RD ? ?M-B ?

(SCALE 4/1) TOP VIEW

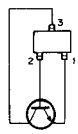
SB05-05CP

(SCALE 4/1) TOP VIEW

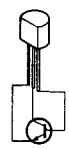


2SA1162

(SCALE 4/1) TOP VIEW

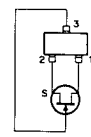


2SC1623



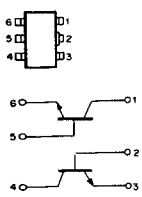
2SC2878

TOP VIEW (SCALE 4/1)



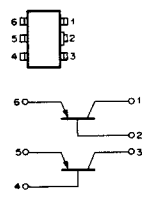
2SK94

(SCALE 6/1) TOP VIEW



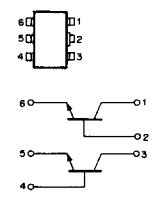
XN4608

(SCALE 6/1) TOP VIEW



XN6401

(SCALE 6/1) TOP VIEW

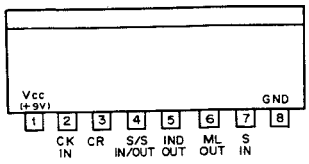


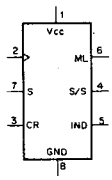
XN6501
XN6534

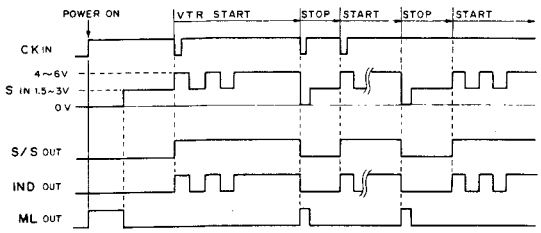
CX518 (SONY)

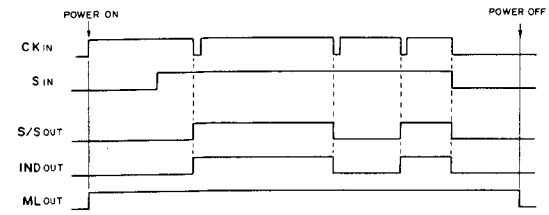
INTERFACE CIRCUIT BETWEEN VTR AND CAMERA

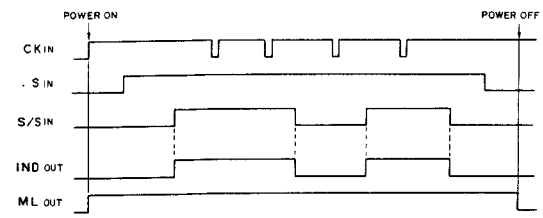
– SIDE VIEW –







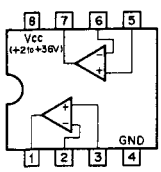




LM2903M (RAYTHEON) FLAT PACKAGE

DUAL VOLTAGE COMPARATORS

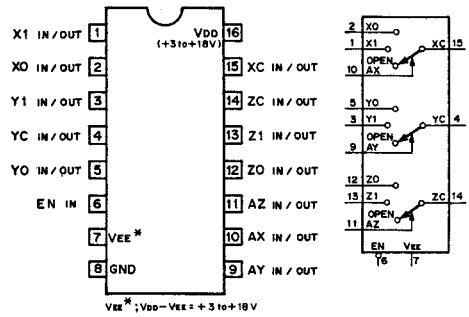
– TOP VIEW –



MC14053BF (MOTOROLA) FLAT PACKAGE

C-MOS TRIPLE 2-CHANNEL ANALOG MULTIPLEXER/DEMULTIPLEXER

– TOP VIEW –



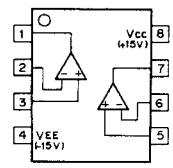
CONT. INPUTS		ON
EN	A (X,Y,Z,)	CHANNEL
0	0	0
0	1	1
1	X	OPEN

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE.

RC2043MD (RAYTHEON) FLAT PACKAGE

OPERATIONAL AMPLIFIER

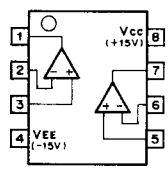
– TOP VIEW –



RC4560M (RAYTHEON) FLAT PACKAGE

OPERATIONAL AMPLIFIER

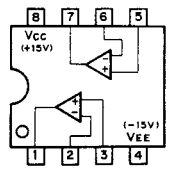
– TOP VIEW –



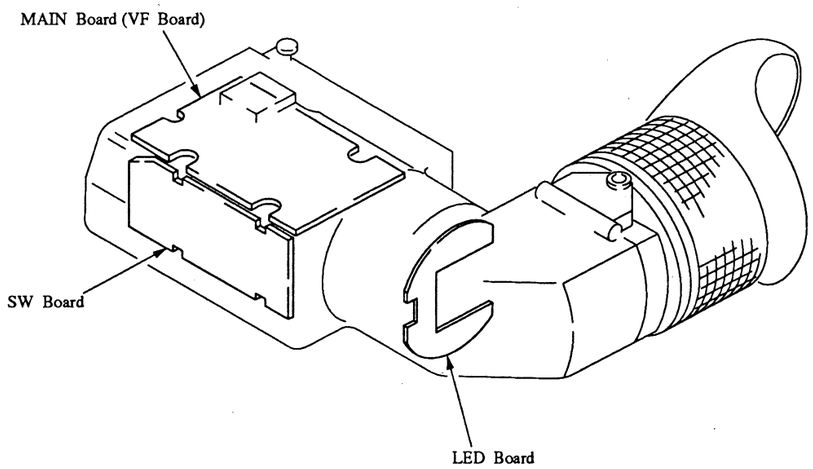
uPC4558G2 (NEC) FLAT PACKAGE

OPERATIONAL AMPLIFIER

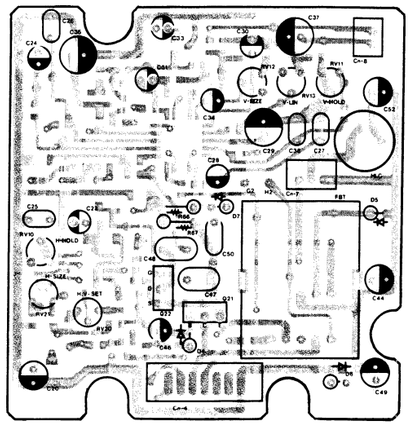
– TOP VIEW –



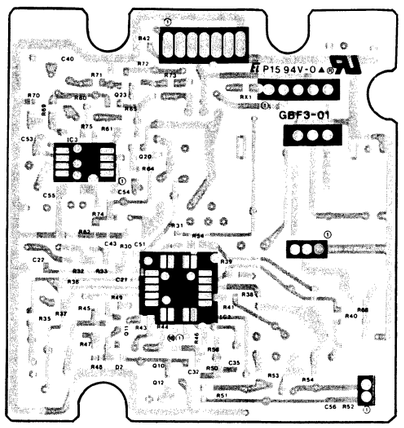
SECTION C
SCHEMATIC DIAGRAMS AND BOARD ILLUSTRATIONS



MAIN BOARD

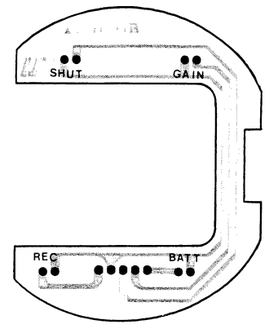


COMPONENT SIDE



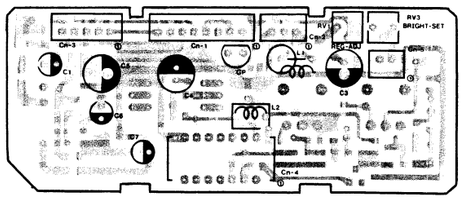
SOLDERING SIDE

LED BOARD

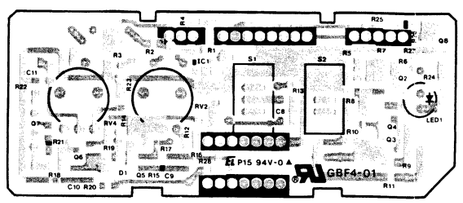


COMPONENT SIDE

SW BOARD

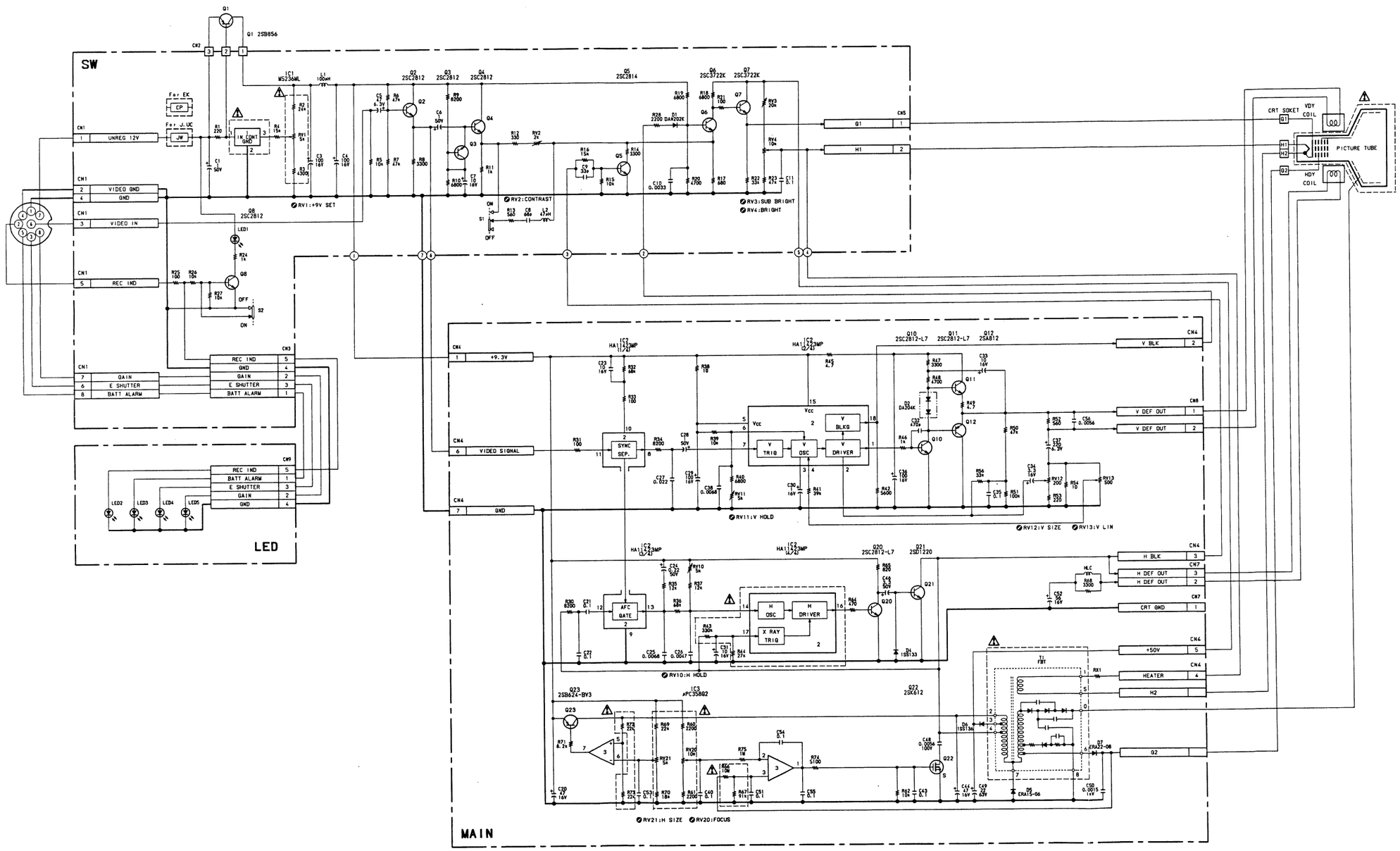


COMPONENT SIDE



SOLDERING SIDE

FRAME



DXF-501 (J, UC)
DXF-501CE (EK)

C-5 C-6

B-DXF501-FRAME/M

SECTION D
SPARE PARTS

PARTS INFORMATION

1. **Safety Related Component Warning**

   Components indentified by shading marked with ⚠ on the schematic diagrams, exploded views and electrical spare parts list are critical to safe operation. Replace these components with Sony parts whose parts numbers appear as shown in this manual or in service manual supplements published by Sony.

2. Replacement Parts supplied from Sony Parts Center will sometimes have different shape and outside view from the parts which actually in use. This is due to **"accommodating the improved parts and/or engineering changes" or "standardization of genuine parts."** This manual 's exploded view and electrical spare parts lists are indicating the parts numbers of "the standardized genuine parts at present." Regarding engineering parts and diagrams changes in our engineering department, refer to SONY service bulletins and service manual supplements.

3. The parts marked with "S" in the SP column of the exploded views and electrical spare parts list are normally required for routine service work. Orders for parts marked with "O" will be processed, but allow for additional delivery time.

4. Item with no parts number and/or no description are not stocked because they are seldom required for routine service.

5. All capacitors are in micro farads unless otherwise specified.
   All inductors are in micro henries unless otherwise specified.
   All resistors are in ohms.

EXPLODED VIEW

CCD BLOCK

No.	Part No.	SP	Description
1	A-7515-210-A	o	MOUNTED CIRCUIT BOARD, CN-432
2	A-7515-216-A	o	MOUNTED CIRCUIT BOARD, TG-72(N) (for DXC-327)
3	A-7515-217-A	o	MOUNTED CIRCUIT BOARD, TG-72(P) (for DXC-327P)
4	A-7515-218-A	o	MOUNTED CIRCUIT BOARD, PA-106
5	A-7515-219-A	o	MOUNTED CIRCUIT BOARD, PA-107G
6	A-7515-220-A	o	MOUNTED CIRCUIT BOARD, PA-107B
7	A-7515-221-A	o	MOUNTED CIRCUIT BOARD, BC-22
8	A-7520-515-A	o	MOUNTED CIRCUIT BOARD, SW-445
9	A-7575-155-A	s	CCD UNIT (N) (for DXC-327)
10	A-7575-156-A	s	CCD UNIT (P) (for DXC-327P)
11	X-3165-232-1	o	COVER ASSY, BLOCK SHIELD
12	1-547-463-11	o	FILTER UNIT, OPTICAL
13	1-553-739-21	s	SWITCH, KEY BOARD
14	1-554-486-00	s	SWITCH, TOGGLE "AUTO W/B BAL"
15	1-942-381-12	s	HARNESS (LENS)
16	3-672-253-11	o	RUBBER, CONDUCTIVE
17	3-676-244-00	s	COVER, SWITCH
18	3-678-629-00	s	LEVER, MOUNT
19	3-678-632-00	o	PACKING, KNOB
20	3-678-684-00	o	HOLDER, CABLE
21	3-699-047-01	s	KNOB, FILTER
22	3-699-106-01	o	PANEL, FRONT
23	3-699-144-01	s	CAP, MOUNT
24	3-699-182-01	o	INSULATOR (2)
25	3-701-506-01	s	SET SCREW, DOUBLE POINT 3X4
26	7-621-770-87	s	SCREW +B 2.6X5
27	7-621-772-18	s	SCREW +B 2X4
28	7-621-773-86	s	SCREW +B 2.6X4
29	7-627-452-28	s	SCREW, PRECISION +K 2X4
30	7-627-552-48	s	SCREW, PRECISION +P 1.7X4
31	7-627-556-38	s	SCREW +P 2.6X4.0
32	7-682-547-04	s	SCREW +B 3X6
33	7-682-549-09	s	SCREW +B 3X10
34	7-682-550-09	s	SCREW +B 3X12

SECTION D
SPARE PARTS

PARTS INFORMATION

1. **Safety Related Component Warning**

   Components indentified by shading marked with ⚠ on the schematic diagrams, exploded views and electrical spare parts list are critical to safe operation. Replace these components with Sony parts whose parts numbers appear as shown in this manual or in service manual supplements published by Sony.

2. Replacement Parts supplied from Sony Parts Center will sometimes have different shape and outside view from the parts which actually in use. This is due to **"accommodating the improved parts and/or engineering changes" or "standardization of genuine parts."** This manual 's exploded view and electrical spare parts lists are indicating the parts numbers of "the standardized genuine parts at present." Regarding engineering parts and diagrams changes in our engineering department, refer to SONY service bulletins and service manual supplements.

3. The parts marked with "S" in the SP column of the exploded views and electrical spare parts list are normally required for routine service work. Orders for parts marked with "O" will be processed, but allow for additional delivery time.

4. Item with no parts number and/or no description are not stocked because they are seldom required for routine service.

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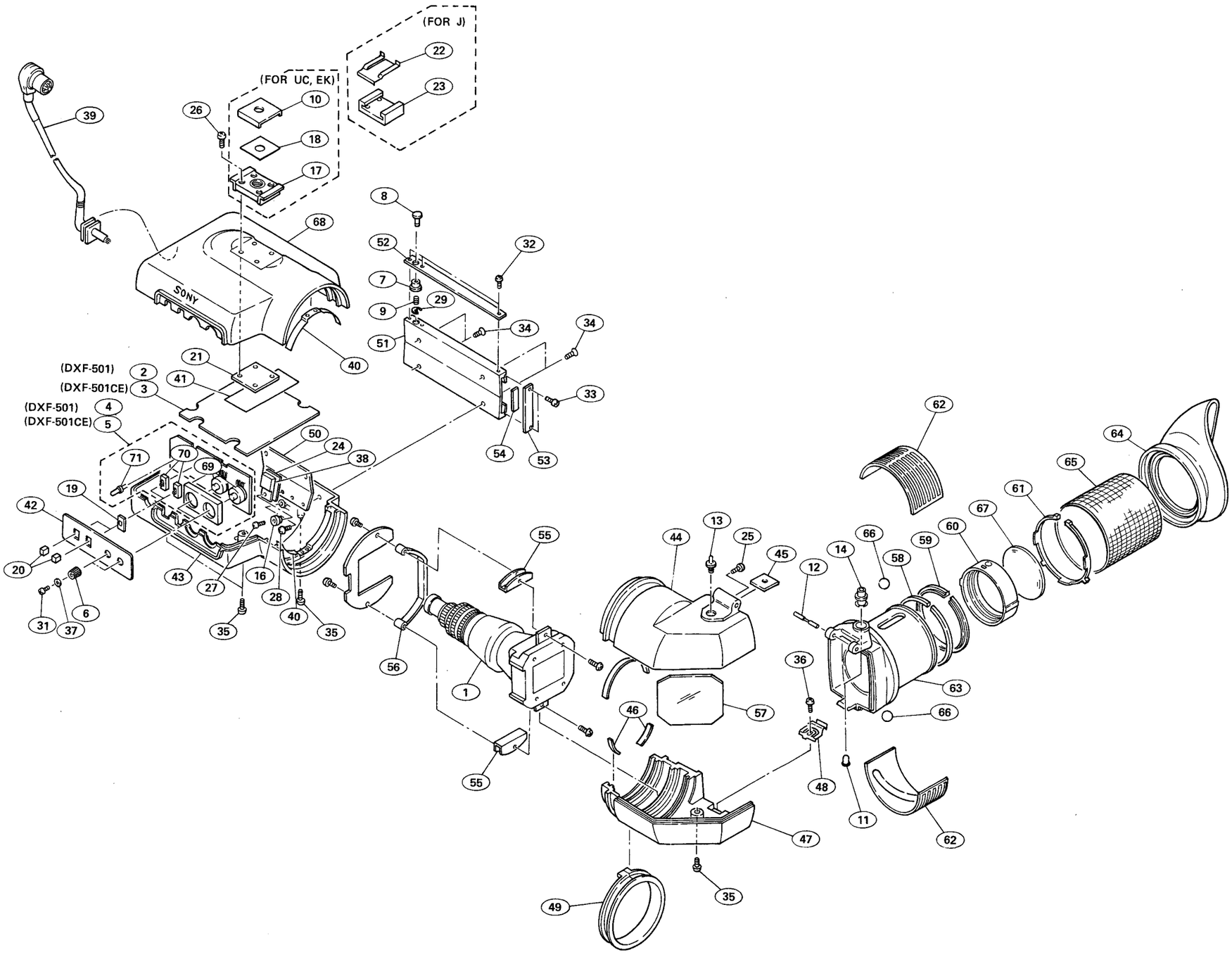
   All inductors are in micro henries unless otherwise specified.
   All resistors are in ohms.

EXPLODED VIEW



CHASSIS (1) BLOCK

No.	Part No.	SP	Description
101	A-7420-147-B	s	PAD ASSY, SHOULDER
102	A-7420-197-A	o	HANDLE ASSY
103	A-7520-516-A	o	MOUNTED CIRCUIT BOARD, SW-446
104	X-3664-212-2	s	SHOE ASSY (B), T
105	X-3699-015-1	o	BRACKET(B) ASSY
106	1-542-112-11	s	MICROPHONE (C-2025)
107	1-553-972-00	s	SWITCH, TOGGLE "POWER"
108	1-561-320-12	s	SOCKET, DIN 8P "VF"
109	1-561-781-11	s	CONNECTOR, BNC "VIDEO OUT"
110	1-562-782-21	s	CONNECTOR 10P FEMALE "REMOTE"
111	1-570-985-11	s	SWITCH, TOGGLE "GAIN" "WB"
112	1-942-381-12	s	HARNESS (LENS)
113	1-946-627-11	o	HARNESS (RM)
114	2-277-468-01	o	PLATE, ORNAMENTAL, CAMERA SHOE
115	3-166-292-01	o	PLATE, CONNECTOR
116	3-166-293-01	o	STOPPER, PC BOARD
117	3-166-298-01	o	LABEL, SW
118	3-641-622-00	s	SPRING, COMPRESSION
119	3-657-700-00	s	BRACKET, ACCESSORY
120	3-664-213-00	o	SCREW, STOPPER
121	3-664-218-00	o	SHUE
122	3-664-228-00	o	PLATE, SPRING
123	3-672-213-00	o	SHEET, ADHESIVE
124	3-675-963-02	s	FOOT, FRONT, RUBBER
125	3-675-964-01	s	FOOT, REAR, RUBBER
126	3-675-965-01	s	SPACER (2.6X2)
127	3-682-718-02	o	SHOE, VF SLIDE
128	3-682-758-01	o	SPACER
129	3-682-759-01	o	RING, LOCK
130	3-682-760-01	o	SCREW (M7-0.75), ADJUSTMENT
131	3-689-039-11	s	BOLT (M2X6), HOLE, HEXAGON
132	3-699-104-01	o	CABINET
133	3-699-110-01	o	BRACKET (A)
134	3-699-131-01	o	GUIDE, PC BOARD
135	3-699-145-01	o	PLATE, GROUND
136	3-699-176-01	o	STOPPER (2)
137	3-725-907-01	s	BUSHING, BLIND
138	7-621-770-87	s	SCREW +B 2.6X5
139	7-621-772-18	s	SCREW +B 2X4
140	7-621-772-30	s	SCREW +B 2X6
141	7-621-773-86	s	SCREW +B 2.6X4
142	7-621-775-20	s	SCREW +B 2.6X5
143	7-682-247-04	s	SCREW +K 3X6
144	7-682-546-09	s	SCREW +B 3X5
145	7-682-547-09	s	SCREW +B 3X6
146	7-682-561-09	s	SCREW +B 4X8
147	7-682-562-09	s	SCREW +B 4X10
148	7-683-410-04	s	BOLT,HEXAGON SOCKET 3X20
149	7-683-412-05	s	BOLT,HEXAGON SOCKET 2.6X6
150	7-683-425-04	s	BOLT,HEXAGON SOCKET 4X20
151	8-814-189-31	s	MICROPHONE, BUILT-IN (C-1007A)
152	1-562-222-41	o	CONNECTOR, 6P FEMALE "LENS"

CHASSIS (2) BLOCK

No.	Part No.	SP	Description
201	A-7420-143-A	o	PLATE (LEFT) ASSY, SIDE
202	A-7420-188-A	o	PLATE (RIGHT) ASSY, SIDE
203	A-7513-840-A	o	MOUNTED CIRCUIT BOARD, MX-18A(N) (for DXC-327)
204	A-7513-841-A	o	MOUNTED CIRCUIT BOARD, CM-22(N) (for DXC-327)
205	A-7513-842-A	o	MOUNTED CIRCUIT BOARD, BKG-4 (for DXC-327)
206	A-7513-844-A	o	MOUNTED CIRCUIT BOARD, MX-18A(P) (for DXC-327P)
207	A-7513-845-A	o	MOUNTED CIRCUIT BOARD, CM-22(P) (for DXC-327P)
208	A-7515-211-A	o	MOUNTED CIRCUIT BOARD, AT-63
209	A-7515-212-A	o	MOUNTED CIRCUIT BOARD, MB-325(N) (for DXC-327)
210	A-7515-213-A	o	MOUNTED CIRCUIT BOARD, MB-325(P) (for DXC-327P)
211	A-7515-214-A	o	MOUNTED CIRCUIT BOARD, ES-2(N) (for DXC-327)
212	A-7515-215-A	o	MOUNTED CIRCUIT BOARD, ES-2(P) (for DXC-327P)
213	A-7515-223-A	o	MOUNTED CIRCUIT BOARD, PR-148(N) (for DXC-327)
214	A-7515-224-A	o	MOUNTED CIRCUIT BOARD, PR-148(P) (for DXC-327P)
215	A-7515-225-A	o	MOUNTED CIRCUIT BOARD, PR-147
216	A-7515-226-A	o	MOUNTED CIRCUIT BOARD, VA-105R
217	A-7515-227-A	o	MOUNTED CIRCUIT BOARD, VA-105G
218	A-7515-228-A	o	MOUNTED CIRCUIT BOARD, VA-105B
219	A-7515-229-A	o	MOUNTED CIRCUIT BOARD, IE-29(N) (for DXC-327)
220	A-7515-230-A	o	MOUNTED CIRCUIT BOARD, IE-29(P) (for DXC-327P)
221	1-237-518-21	s	RES, ADJ, METAL 10K "PHASE SC/H"
222	1-553-977-00	s	SWITCH, SLIDE "MARKER"
223	1-554-303-21	s	SWITCH, KEY BOARD "REC REVIEW"
224	1-554-364-00	s	SWITCH, SLIDE "DISP CHG"
225	1-570-865-11	s	SWITCH, SLIDE "SHUTTER" "ZEBRA" "PHASE" "BARS"
226	1-574-145-11	s	WIRE, FLAT TYPE (30 CORE)
227	1-590-168-11	s	WIRE, FLAT TYPE (16 CORE)
228	3-166-294-01	o	FRAME, SLIDE DOOR
229	3-166-295-01	o	DOOR, SLIDE
230	3-166-296-01	o	PLATE, SWITCH
231	3-167-445-01	s	KNOB, SWITCH
232	3-168-689-01	o	PLATE (2) SHIELD AT
233	3-672-253-11	o	RUBBER, CONDUCTIVE
234	3-676-244-00	s	COVER, SWITCH
235	3-699-107-01	o	PLATE (RIGHT), SIDE
236	3-699-125-01	s	KNOB, DISPCHG
237	3-699-137-01	s	PAD (C), SIDE
238	3-699-170-01	o	BRACKET (UPPER), AT
239	3-699-171-01	o	BRACKET (LOWER), AT
240	3-699-172-01	o	SHEET, STOPPER
241	3-699-179-01	o	PLATE, SHIELD, IE
242	7-621-770-87	s	SCREW +B 2.6X5
243	7-621-772-18	s	SCREW +B 2X4
244	7-621-772-20	s	SCREW +B 2X5
245	7-621-775-08	s	SCREW +B 2.6X3
246	7-682-548-09	s	SCREW +B 3X8
247	7-682-553-09	s	SCREW +B 3X20

RESISTOR, CHIP

Part No.	SP	Description
1-216-295-00	s	RES, CHIP 0 5% 1/10W
1-216-298-00	s	RES, CHIP 2.2 5% 1/10W
1-216-302-00	s	RES, CHIP 2.7 5% 1/10W
1-216-304-11	s	RES, CHIP 3.3 5% 1/10W
1-216-306-11	s	RES, CHIP 3.9 5% 1/10W
1-216-308-00	s	RES, CHIP 4.7 5% 1/10W
1-216-309-00	s	RES, CHIP 5.6 5% 1/10W
1-216-311-00	s	RES, CHIP 6.8 5% 1/10W
1-216-313-00	s	RES, CHIP 8.2 5% 1/10W
1-216-001-00	s	RES, CHIP 10 5% 1/10W
1-216-003-11	s	RES, CHIP 12 5% 1/10W
1-216-005-00	s	RES, CHIP 15 5% 1/10W
1-216-007-00	s	RES, CHIP 18 5% 1/10W
1-216-009-00	s	RES, CHIP 22 5% 1/10W
1-216-011-00	s	RES, CHIP 27 5% 1/10W
1-216-013-00	s	RES, CHIP 33 5% 1/10W
1-216-015-00	s	RES, CHIP 39 5% 1/10W
1-216-017-00	s	RES, CHIP 47 5% 1/10W
1-216-019-00	s	RES, CHIP 56 5% 1/10W
1-216-021-00	s	RES, CHIP 68 5% 1/10W
1-216-023-00	s	RES, CHIP 82 5% 1/10W
1-216-025-00	s	RES, CHIP 100 5% 1/10W
1-216-027-00	s	RES, CHIP 120 5% 1/10W
1-216-029-00	s	RES, CHIP 150 5% 1/10W
1-216-031-00	s	RES, CHIP 180 5% 1/10W
1-216-033-00	s	RES, CHIP 220 5% 1/10W
1-216-035-00	s	RES, CHIP 270 5% 1/10W
1-216-037-00	s	RES, CHIP 330 5% 1/10W
1-216-039-00	s	RES, CHIP 390 5% 1/10W
1-216-041-00	s	RES, CHIP 470 5% 1/10W
1-216-043-00	s	RES, CHIP 560 5% 1/10W
1-216-045-00	s	RES, CHIP 680 5% 1/10W
1-216-047-00	s	RES, CHIP 820 5% 1/10W
1-216-049-00	s	RES, CHIP 1k 5% 1/10W
1-216-051-00	s	RES, CHIP 1.2k 5% 1/10W
1-216-053-00	s	RES, CHIP 1.5k 5% 1/10W
1-216-055-00	s	RES, CHIP 1.8k 5% 1/10W
1-216-057-00	s	RES, CHIP 2.2k 5% 1/10W
1-216-059-00	s	RES, CHIP 2.7k 5% 1/10W
1-216-061-00	s	RES, CHIP 3.3k 5% 1/10W
1-216-063-00	s	RES, CHIP 3.9k 5% 1/10W
1-216-065-00	s	RES, CHIP 4.7k 5% 1/10W
1-216-067-00	s	RES, CHIP 5.6k 5% 1/10W
1-216-069-00	s	RES, CHIP 6.8k 5% 1/10W
1-216-071-00	s	RES, CHIP 8.2k 5% 1/10W
1-216-073-00	s	RES, CHIP 10k 5% 1/10W
1-216-075-00	s	RES, CHIP 12k 5% 1/10W
1-216-077-00	s	RES, CHIP 15k 5% 1/10W
1-216-079-00	s	RES, CHIP 18k 5% 1/10W
1-216-081-00	s	RES, CHIP 22k 5% 1/10W
1-216-083-00	s	RES, CHIP 27k 5% 1/10W
1-216-085-00	s	RES, CHIP 33k 5% 1/10W
1-216-748-11	s	RES, CHIP 39k 5% 1/10W
1-216-089-00	s	RES, CHIP 47k 5% 1/10W
1-216-091-00	s	RES, CHIP 56k 5% 1/10W

RESISTOR, CHIP

Part No.	SP	Description
1-216-093-00	s	RES, CHIP 68k 5% 1/10W
1-216-095-00	s	RES, CHIP 82k 5% 1/10W
1-216-097-00	s	RES, CHIP 100k 5% 1/10W
1-216-099-00	s	RES, CHIP 120k 5% 1/10W
1-216-101-00	s	RES, CHIP 150k 5% 1/10W
1-216-103-00	s	RES, CHIP 180k 5% 1/10W
1-216-105-00	s	RES, CHIP 220k 5% 1/10W
1-216-107-00	s	RES, CHIP 270k 5% 1/10W
1-216-109-00	s	RES, CHIP 330k 5% 1/10W
1-216-111-00	s	RES, CHIP 390k 5% 1/10W
1-216-113-00	s	RES, CHIP 470k 5% 1/10W
1-216-115-00	s	RES, CHIP 560k 5% 1/10W
1-216-117-00	s	RES, CHIP 680k 5% 1/10W
1-216-119-00	s	RES, CHIP 820k 5% 1/10W
1-216-121-00	s	RES, CHIP 1.0M 5% 1/10W
1-216-123-11	s	RES, CHIP 1.2M 5% 1/10W
1-216-125-00	s	RES, CHIP 1.5M 5% 1/10W
1-216-127-11	s	RES, CHIP 1.8M 5% 1/10W
1-216-129-00	s	RES, CHIP 2.2M 5% 1/10W
1-216-131-11	s	RES, CHIP 2.7M 5% 1/10W
1-216-133-00	s	RES, CHIP 3.3M 5% 1/10W

CAPACITOR, CHIP CERAMIC

Part No.	SP	Description			
1-163-083-00	s	CAP, CHIP CERAMIC	1pF	+-0.25pF	50V
1-163-085-00	s	CAP, CHIP CERAMIC	2pF	+-0.25pF	50V
1-163-087-00	s	CAP, CHIP CERAMIC	4pF	+-0.25pF	50V
1-163-089-00	s	CAP, CHIP CERAMIC	6pF	+-0.5pF	50V
1-163-091-00	s	CAP, CHIP CERAMIC	8pF	+-0.5pF	50V
1-163-093-00	s	CAP, CHIP CERAMIC	10pF	5%	50V
1-163-097-00	s	CAP, CHIP CERAMIC	15pF	5%	50V
1-163-101-00	s	CAP, CHIP CERAMIC	22pF	5%	50V
1-163-105-00	s	CAP, CHIP CERAMIC	33pF	5%	50V
1-163-109-00	s	CAP, CHIP CERAMIC	47pF	5%	50V
1-163-113-00	s	CAP, CHIP CERAMIC	68pF	5%	50V
1-163-117-00	s	CAP, CHIP CERAMIC	100pF	5%	50V
1-163-121-00	s	CAP, CHIP CERAMIC	150pF	5%	50V
1-163-125-00	s	CAP, CHIP CERAMIC	220pF	5%	50V
1-163-129-00	s	CAP, CHIP CERAMIC	330pF	5%	50V
1-163-133-00	s	CAP, CHIP CERAMIC	470pF	5%	50V
1-163-137-00	s	CAP, CHIP CERAMIC	680pF	5%	50V
1-163-141-00	s	CAP, CHIP CERAMIC	1000pF	5%	50V
1-163-145-00	s	CAP, CHIP CERAMIC	1500pF	10%	50V
1-164-161-11	s	CAP, CHIP CERAMIC	2200pF	10%	100V
1-164-182-11	s	CAP, CHIP CERAMIC	3300pF	10%	100V
1-163-017-00	s	CAP, CHIP CERAMIC	4700pF	10%	50V
1-163-019-00	s	CAP, CHIP CERAMIC	6800pF	10%	50V
1-164-232-11	s	CAP, CHIP CERAMIC	0.01	20%	100V
1-163-023-00	s	CAP, CHIP CERAMIC	0.015	10%	50V
1-163-034-00	s	CAP, CHIP CERAMIC	0.033		50V
1-163-035-00	s	CAP, CHIP CERAMIC	0.047		50V
1-163-036-00	s	CAP, CHIP CERAMIC	0.068		50V
1-163-038-00	s	CAP, CHIP CERAMIC	0.1		50V

RESISTOR, CHIP METAL

Part No.	SP	Description			
1-216-603-11	s	RES, CHIP METAL	10	1%	1/10W
1-216-605-11	s	RES, CHIP METAL	12	1%	1/10W
1-216-609-11	s	RES, CHIP METAL	18	1%	1/10W
1-216-611-11	s	RES, CHIP METAL	22	1%	1/10W
1-216-614-11	s	RES, CHIP METAL	30	1%	1/10W
1-216-617-11	s	RES, CHIP METAL	39	1%	1/10W
1-216-619-11	s	RES, CHIP METAL	47	1%	1/10W
1-216-620-11	s	RES, CHIP METAL	51	1%	1/10W
1-216-623-11	s	RES, CHIP METAL	68	1%	1/10W
1-216-624-11	s	RES, CHIP METAL	75	1%	1/10W
1-216-625-11	s	RES, CHIP METAL	82	1%	1/10W
1-216-626-11	s	RES, CHIP METAL	91	1%	1/10W
1-216-627-11	s	RES, CHIP METAL	100	1%	1/10W
1-216-629-11	s	RES, CHIP METAL	120	1%	1/10W
1-216-631-11	s	RES, CHIP METAL	150	1%	1/10W
1-216-633-11	s	RES, CHIP METAL	180	1%	1/10W
1-216-634-11	s	RES, CHIP METAL	200	1%	1/10W
1-216-635-11	s	RES, CHIP METAL	220	1%	1/10W
1-216-636-11	s	RES, CHIP METAL	240	1%	1/10W
1-216-637-11	s	RES, CHIP METAL	270	1%	1/10W
1-216-638-11	s	RES, CHIP METAL	300	1%	1/10W
1-216-639-11	s	RES, CHIP METAL	330	1%	1/10W
1-216-640-11	s	RES, CHIP METAL	360	1%	1/10W
1-216-641-11	s	RES, CHIP METAL	390	1%	1/10W
1-216-642-11	s	RES, CHIP METAL	430	1%	1/10W
1-216-643-11	s	RES, CHIP METAL	470	1%	1/10W
1-216-644-11	s	RES, CHIP METAL	510	1%	1/10W
1-216-645-11	s	RES, CHIP METAL	560	1%	1/10W
1-216-647-11	s	RES, CHIP METAL	680	1%	1/10W
1-216-648-11	s	RES, CHIP METAL	750	1%	1/10W
1-216-649-11	s	RES, CHIP METAL	820	1%	1/10W
1-216-650-11	s	RES, CHIP METAL	910	1%	1/10W
1-216-651-11	s	RES, CHIP METAL	1.0k	1%	1/10W
1-216-652-11	s	RES, CHIP METAL	1.1k	1%	1/10W
1-216-653-11	s	RES, CHIP METAL	1.2k	1%	1/10W
1-216-655-11	s	RES, CHIP METAL	1.5k	1%	1/10W
1-216-656-11	s	RES, CHIP METAL	1.6k	1%	1/10W
1-216-657-11	s	RES, CHIP METAL	1.8k	1%	1/10W
1-216-658-11	s	RES, CHIP METAL	2k	1%	1/10W
1-216-659-11	s	RES, CHIP METAL	2.2k	1%	1/10W
1-216-660-11	s	RES, CHIP METAL	2.4k	1%	1/10W
1-216-661-11	s	RES, CHIP METAL	2.7k	1%	1/10W
1-216-662-11	s	RES, CHIP METAL	3k	1%	1/10W
1-216-663-11	s	RES, CHIP METAL	3.3k	1%	1/10W
1-216-664-11	s	RES, CHIP METAL	3.5k	1%	1/10W
1-216-665-11	s	RES, CHIP METAL	3.9k	1%	1/10W
1-216-666-11	s	RES, CHIP METAL	4.3k	1%	1/10W
1-216-667-11	s	RES, CHIP METAL	4.7k	1%	1/10W
1-216-668-11	s	RES, CHIP METAL	5.1k	1%	1/10W
1-216-669-11	s	RES, CHIP METAL	5.6k	1%	1/10W

RESISTOR, CHIP METAL

Part No.	SP	Description
1-216-670-11	s	RES, CHIP METAL 6.2k 1% 1/10W
1-216-671-11	s	RES, CHIP METAL 6.8k 1% 1/10W
1-216-672-11	s	RES, CHIP METAL 7.5k 1% 1/10W
1-216-673-11	s	RES, CHIP METAL 8.2k 1% 1/10W
1-216-674-11	s	RES, CHIP METAL 9.1k 1% 1/10W
1-216-675-11	s	RES, CHIP METAL 10k 1% 1/10W
1-216-676-11	s	RES, CHIP METAL 11k 1% 1/10W
1-216-677-11	s	RES, CHIP METAL 12k 1% 1/10W
1-216-678-11	s	RES, CHIP METAL 13k 1% 1/10W
1-216-679-11	s	RES, CHIP METAL 15k 1% 1/10W
1-216-680-11	s	RES, CHIP METAL 16k 1% 1/10W
1-216-681-11	s	RES, CHIP METAL 18k 1% 1/10W
1-216-682-11	s	RES, CHIP METAL 20k 1% 1/10W
1-216-683-11	s	RES, CHIP METAL 22k 1% 1/10W
1-216-684-11	s	RES, CHIP METAL 24k 1% 1/10W
1-216-685-11	s	RES, CHIP METAL 27k 1% 1/10W
1-216-686-11	s	RES, CHIP METAL 30k 1% 1/10W
1-216-687-11	s	RES, CHIP METAL 33k 1% 1/10W
1-216-688-11	s	RES, CHIP METAL 36k 1% 1/10W
1-216-689-11	s	RES, CHIP METAL 39k 1% 1/10W
1-216-690-11	s	RES, CHIP METAL 43k 1% 1/10W
1-216-691-11	s	RES, CHIP METAL 49k 1% 1/10W
1-216-692-11	s	RES, CHIP METAL 51k 1% 1/10W
1-216-693-11	s	RES, CHIP METAL 56k 1% 1/10W
1-216-694-11	s	RES, CHIP METAL 62k 1% 1/10W
1-216-695-11	s	RES, CHIP METAL 68k 1% 1/10W
1-216-696-11	s	RES, CHIP METAL 75k 1% 1/10W
1-216-697-11	s	RES, CHIP METAL 82k 1% 1/10W
1-216-698-11	s	RES, CHIP METAL 91k 1% 1/10W
1-216-699-11	s	RES, CHIP METAL 100k 1% 1/10W

AT-63 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-7515-211-A	o	MOUNTED CIRCUIT BOARD "AT-63"
C1	1-124-234-00	s	ELECT 22uF 20% 16V
C2	1-126-154-11	s	ELECT 47uF 20% 6.3V
C3	1-126-154-11	s	ELECT 47uF 20% 6.3V
C4	1-124-229-00	s	ELECT 33uF 20% 10V
C5	1-124-229-00	s	ELECT 33uF 20% 10V
C6	1-124-229-00	s	ELECT 33uF 20% 10V
C8	1-126-157-11	s	ELECT 10uF 20% 16V
C9	1-163-251-11	s	CERAMIC 100PF 5% 50V
C10	1-131-347-00	s	TANTALUM 1uF 10% 35V
C11	1-131-347-00	s	TANTALUM 1uF 10% 35V
C13	1-124-234-00	s	ELECT 22uF 20% 16V
C14	1-126-153-11	s	ELECT 22uF 20% 6.3V
C16	1-124-589-11	s	ELECT 47uF 20% 16V
C18	1-124-584-00	s	ELECT 100uF 20% 10V
C20	1-124-234-00	s	ELECT 22uF 20% 16V
C21	1-126-153-11	s	ELECT 22uF 20% 6.3V
C22	1-126-153-11	s	ELECT 22uF 20% 6.3V
C23	1-126-153-11	s	ELECT 22uF 20% 6.3V
C24	1-124-234-00	s	ELECT 22uF 20% 16V
C25	1-126-153-11	s	ELECT 22uF 20% 6.3V
C26	1-126-163-11	s	ELECT 4.7MF 20% 50V
C27	1-126-163-11	s	ELECT 4.7MF 20% 50V
C28	1-126-163-11	s	ELECT 4.7MF 20% 50V
C29	1-126-163-11	s	ELECT 4.7MF 20% 50V
C34	1-124-234-00	s	ELECT 22uF 20% 16V
C35	1-126-160-11	s	ELECT 1uF 20% 50V
C36	1-126-160-11	s	ELECT 1uF 20% 50V
C37	1-130-489-00	s	MYLAR 0.033uF 5% 50V
C39	1-126-160-11	s	ELECT 1uF 20% 50V
C41	1-126-153-11	s	ELECT 22uF 20% 6.3V
C43	1-126-153-11	s	ELECT 22uF 20% 6.3V
C45	1-163-245-11	s	CERAMIC 56PF 5% 50V
C46	1-131-379-00	s	TANTALUM 22uF 10% 10V
C47	1-131-379-00	s	TANTALUM 22uF 10% 10V
C50	1-126-157-11	s	ELECT 10uF 20% 16V
C53	1-126-157-11	s	ELECT 10uF 20% 16V
C62	1-124-234-00	s	ELECT 22uF 20% 16V
C63	1-126-153-11	s	ELECT 22uF 20% 6.3V
C67	1-126-157-11	s	ELECT 10uF 20% 16V
C68	1-126-157-11	s	ELECT 10uF 20% 16V
C69	1-126-157-11	s	ELECT 10uF 20% 16V
C70	1-126-153-11	s	ELECT 22uF 20% 6.3V
C79	1-131-365-00	s	TANTALUM 10uF 10% 20V
C80	1-126-160-11	s	ELECT 1uF 20% 50V
C81	1-126-157-11	s	ELECT 10uF 20% 16V
C82	1-124-589-11	s	ELECT 47uF 20% 16V
CN1	1-566-516-11	s	CONNECTOR, FPC (ZIF) 16P
CN2	1-565-210-11	s	CONNECTOR, FPC (ZIF) 30P
CN3	1-506-467-11	o	CONNECTOR, 2P, MALE
CN4	1-506-468-11	o	CONNECTOR, 3P, MALE
CV1	1-141-245-00	s	CAP, TRIMMER 30PF
D2	8-719-800-76	s	DIODE 1SS226
D3	8-719-400-18	s	DIODE MA152WK
D5	8-719-400-18	s	DIODE MA152WK
D9	8-719-400-18	s	DIODE MA152WK
D10	8-719-400-18	s	DIODE MA152WK

(AT-63 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
D11	8-719-400-18	s	DIODE MA152WK
D12	8-719-400-18	s	DIODE MA152WK
D13	8-719-105-90	s	DIODE RD5.6M-B1
D14	8-719-400-18	s	DIODE MA152WK
D21	8-719-800-76	s	DIODE 1SS226
D23	8-719-400-18	s	DIODE MA152WK
D24	8-719-800-76	s	DIODE 1SS226
D25	8-719-104-34	s	DIODE 1S2836
D26	8-719-104-34	s	DIODE 1S2836
D27	8-719-104-34	s	DIODE 1S2836
D28	8-719-104-34	s	DIODE 1S2836
IC1	8-759-300-71	s	IC MC14053BF
IC2	8-759-101-12	s	IC UPC311G2
IC3	8-759-981-65	s	IC LM2903M
IC4	8-759-906-54	s	IC TL064CNS
IC5	8-759-300-71	s	IC MC14053BF
IC7	8-759-906-54	s	IC TL064CNS
IC8	8-759-009-10	s	IC MC14069UBF
IC9	8-759-323-26	s	IC HD6305Y0E17F
IC10	8-759-977-80	s	IC MB88342PF
IC11	8-759-977-80	s	IC MB88342PF
IC12	8-759-009-05	s	IC MC14051BF
IC13	8-759-008-74	s	IC MC14001BF
IC14	8-759-906-54	s	IC TL064CNS
IC15	8-759-906-54	s	IC TL064CNS
IC16	8-759-112-72	s	IC UPD6142G-101
IC17	8-759-906-54	s	IC TL064CNS
IC18	8-759-300-71	s	IC MC14053BF
IC19	8-759-633-29	s	IC M6M80011L
IC20	8-759-009-10	s	IC MC14069UBF
IC21	8-759-908-17	s	IC TL082CPS
L4	1-408-783-00	s	CHIP 33uH
L5	1-408-786-21	s	INDUCTOR CHIP 56UH
L6	1-408-783-00	s	CHIP 33uH
Q1	8-729-216-22	s	TRANSISTOR 2SA1162
Q2	8-729-216-22	s	TRANSISTOR 2SA1162
Q3	8-729-216-22	s	TRANSISTOR 2SA1162
Q4	8-729-100-66	s	TRANSISTOR 2SC1623
Q5	8-729-402-19	s	TRANSISTOR XN6501
Q6	8-729-402-19	s	TRANSISTOR XN6501
Q7	8-729-100-66	s	TRANSISTOR 2SC1623
Q8	8-729-402-84	s	TRANSISTOR XN4601
Q9	8-729-402-84	s	TRANSISTOR XN4601
Q10	8-729-109-41	s	TRANSISTOR 2SK94-X1
Q11	8-729-100-66	s	TRANSISTOR 2SC1623
Q12	8-729-402-19	s	TRANSISTOR XN6501
Q13	8-729-403-32	s	TRANSISTOR XN6534
Q14	8-729-402-84	s	TRANSISTOR XN4601
Q20	8-729-402-19	s	TRANSISTOR XN6501
Q21	8-729-402-19	s	TRANSISTOR XN6501
Q23	8-729-100-66	s	TRANSISTOR 2SC1623
RB1	1-231-387-00	s	COMPOSITION CIRCUIT BLOC
RV1	1-237-603-11	s	RES, ADJ, METAL 2.2K
RV2	1-237-606-11	s	RES, ADJ, METAL 22K
RV3	1-237-603-11	s	RES, ADJ, METAL 2.2K
RV4	1-237-518-21	s	RES, ADJ, METAL 10K
RV5	1-237-518-21	s	RES, ADJ, METAL 10K

(AT-63 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
RV6	1-230-528-11	s	RES, ADJ, METAL 220K
S1	1-570-865-11	s	SWITCH, SLIDE
S2	1-553-977-00	s	SWITCH, SLIDE
S3	1-554-303-21	s	SWITCH, TACTILE
S4	1-570-865-11	s	SWITCH, SLIDE
S5	1-570-865-11	s	SWITCH, SLIDE
S7	1-570-854-11	s	SWITCH, SLIDE
S8	1-570-865-11	s	SWITCH, SLIDE
S9	1-554-364-00	s	SWITCH, SLIDE
S10	1-570-865-11	s	SWITCH, SLIDE
X1	1-567-192-11	s	RESONATOR, CERAMIC 4.00MHz

BC-22 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-7515-221-A	o	MOUNTED CIRCUIT BOARD "BC-22"
3pcs	1-569-193-11	s	CONTACT
C1	1-124-120-11	s	ELECT 220uF 20% 25V
C2	1-126-176-11	s	ELECT 220uF 20% 10V
C3	1-124-120-11	s	ELECT 220uF 20% 25V
C4	1-131-379-00	s	TANTALUM 22uF 10% 10V
CN1	1-566-257-31	o	CONNECTOR, BOARD TO BOARD 11P
CN2	1-566-257-31	o	CONNECTOR, BOARD TO BOARD 11P
CN5	1-562-156-11	o	HOUSING, 11P
CN6	1-562-152-11	o	HOUSING, 7P
CN21	1-569-196-11	o	HOUSING, 3P
IC1	8-759-233-18	s	IC TC74HC374AF
L1	1-408-413-00	s	INDUCTOR 22uH

CM-22 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
C1	1-163-251-11	s	CERAMIC 100PF 5% 50V
C2	1-135-164-21	s	TANTAL 22uF 20% 10V
C4	1-163-251-11	s	CERAMIC 100PF 5% 50V
C5	1-135-164-21	s	TANTAL 22uF 20% 10V
C7	1-163-114-00	s	CERAMIC, CHIP 75PF 5% 50V
C9	1-163-114-00	s	CERAMIC, CHIP 75PF 5% 50V
C11	1-163-251-11	s	CERAMIC 100PF 5% 50V
CN1	1-566-095-11	s	PIN, BOARD TO BOARD 5P
IC1	8-759-906-59	s	IC CX22017
Q1	8-729-100-66	s	TRANSISTOR 2SC1623
Q2	8-729-100-66	s	TRANSISTOR 2SC1623
Q3	8-729-100-66	s	TRANSISTOR 2SC1623
RV1	1-228-394-00	s	RES, ADJ, METAL 4.7K
RV2	1-228-394-00	s	RES, ADJ, METAL 4.7K

CN-432 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-7515-210-A	o	MOUNTED CIRCUIT BOARD "CN-432"
C4	1-135-159-21	s	TANTALUM, CHIP 10uF 10% 20V
C5	1-135-159-21	s	TANTALUM, CHIP 10uF 10% 20V
C6	1-135-125-21	s	TANTALUM, CHIP 33uF 20% 10V
C15	1-135-125-21	s	TANTALUM, CHIP 33uF 20% 10V
CN1	1-563-691-21	o	CONNECTOR, BOARD TO BOARD 18P
CN2	1-563-687-21	o	CONNECTOR, BOARD TO BOARD 14P
CN3	1-565-160-11	o	PIN, CONNECTOR (ANGLE) 13P
CN4	1-565-150-11	o	PIN, CONNECTOR (ANGLE) 3P
CN5	1-565-160-11	o	PIN, CONNECTOR (ANGLE) 13P
CN6	1-565-151-11	o	CONNECTOR, 4P, MALE
CN7	1-565-160-11	o	PIN, CONNECTOR (ANGLE) 13P
CN8	1-565-150-11	o	PIN, CONNECTOR (ANGLE) 3P
D1	8-719-400-18	s	DIODE MA152WK
D2	8-719-400-18	s	DIODE MA152WK
D3	8-719-400-18	s	DIODE MA152WK
D5	8-719-400-18	s	DIODE MA152WK
D6	8-719-400-18	s	DIODE MA152WK
D7	8-719-400-18	s	DIODE MA152WK
IC1	8-759-243-06	s	IC TC74AC04F
IC2	8-759-243-06	s	IC TC74AC04F
Q1	8-729-216-22	s	TRANSISTOR 2SA1162
Q2	8-729-100-66	s	TRANSISTOR 2SC1623
Q3	8-729-140-47	s	TRANSISTOR 2SC3735-L-B35
Q4	8-729-112-65	s	TRANSISTOR 2SA1462

DR-107 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
C1	1-135-138-11	s	TANTAL 10uF 20% 25V
C2	1-135-076-21	s	TANTALUM, CHIP 1uF 10% 35V
C3	1-135-076-21	s	TANTALUM, CHIP 1uF 10% 35V
C9	1-135-159-21	s	TANTALUM, CHIP 10uF 10% 20V
C11	1-163-235-11	s	CERAMIC 22PF 5% 50V
C14	1-135-213-21	s	TANTAL 3.3uF 20% 25V
C15	1-135-164-21	s	TANTAL 22uF 20% 10V
C16	1-135-216-11	s	TANTAL 10uF 20% 10V
C17	1-163-102-00	s	
C20	1-135-164-21	s	TANTAL 22uF 20% 10V
C21	1-135-213-21	s	TANTAL 3.3uF 20% 25V
C22	1-135-076-21	s	TANTALUM, CHIP 1uF 10% 35V
C23	1-135-165-11	s	TANTAL 33uF 10% 16V
CN1	1-566-257-31	o	CONNECTOR, BOARD TO BOARD 11P
CN2	1-566-280-21	o	CONNECTOR, BOARD TO BOARD 18P
CN3	1-566-276-21	o	CONNECTOR, BOARD TO BOARD 14P
CN4	1-566-258-11	o	CONNECTOR, BOARD TO BOARD 12P
D1	8-719-800-76	s	DIODE 1SS226
D2	8-719-400-18	s	DIODE MA152WK
D4	8-719-400-18	s	DIODE MA152WK
D5	8-719-400-18	s	DIODE MA152WK
IC1	8-759-925-80	s	IC SN74HC14NS
IC2	8-759-925-76	s	IC SN74HC08NS
IC3	8-759-100-95	s	IC UPC324G2
IC4	8-752-327-46	s	IC CXD1250M
IC5	8-752-327-46	s	IC CXD1250M
IC6	8-752-327-46	s	IC CXD1250M
L1	1-408-781-00	s	CHIP 22uH
L2	1-408-765-21	s	INDUCTOR CHIP 1UH
L3	1-408-781-00	s	CHIP 22uH
L4	1-408-781-00	s	CHIP 22uH
Q1	8-729-144-56	s	TRANSISTOR 2SC3617
Q2	8-729-100-66	s	TRANSISTOR 2SC1623
Q3	8-729-100-66	s	TRANSISTOR 2SC1623
Q4	8-729-100-66	s	TRANSISTOR 2SC1623
Q5	8-729-140-47	s	TRANSISTOR 2SC3735-L-B35
Q6	8-729-112-65	s	TRANSISTOR 2SA1462
Q7	8-729-112-65	s	TRANSISTOR 2SA1462
Q8	8-729-140-47	s	TRANSISTOR 2SC3735-L-B35
Q9	8-729-100-66	s	TRANSISTOR 2SC1623
Q10	8-729-216-22	s	TRANSISTOR 2SA1162
Q11	8-729-216-22	s	TRANSISTOR 2SA1162
RV1	1-230-873-11	s	RES, ADJ, METAL 47K
RV2	1-230-873-11	s	RES, ADJ, METAL 47K
RV3	1-230-873-11	s	RES, ADJ, METAL 47K
RV4	1-230-867-11	s	RES, ADJ, METAL 1K
S1	1-572-328-31	s	SWITCH, CHIP

ES-2(P) BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-7515-215-A	o	MOUNTED CIRCUIT BOARD "ES-2(P)"
C1	1-124-589-11	s	ELECT 47uF 20% 16V
C2	1-126-154-11	s	ELECT 47uF 20% 6.3V
C3	1-135-159-21	s	TANTALUM, CHIP 10uF 10% 20V
C4	1-135-159-21	s	TANTALUM, CHIP 10uF 10% 20V
C5	1-163-086-00	s	CERAMIC, CHIP 3PF 50V
C6	1-126-157-11	s	ELECT 10uF 20% 16V
C8	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C9	1-124-584-00	s	ELECT 100uF 20% 10V
C10	1-135-159-21	s	TANTALUM, CHIP 10uF 10% 20V
C13	1-135-161-21	s	TANTALUM, CHIP 22uF 10% 10V
C14	1-135-166-21	s	TANTALUM, CHIP 47uF 10% 10V
C15	1-163-251-11	s	CERAMIC 100PF 5% 50V
C16	1-135-166-21	s	TANTALUM, CHIP 47uF 10% 10V
C17	1-135-085-21	s	TANTALUM, CHIP 4.7uF 10% 25V
C18	1-126-157-11	s	ELECT 10uF 20% 16V
C19	1-163-224-11	s	CERAMIC 7PF 0.25PF 50V
C20	1-135-161-21	s	TANTALUM, CHIP 22uF 10% 10V
C21	1-135-159-21	s	TANTALUM, CHIP 10uF 10% 20V
C22	1-135-159-21	s	TANTALUM, CHIP 10uF 10% 20V
C23	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C24	1-135-166-21	s	TANTALUM, CHIP 47uF 10% 10V
C26	1-135-161-21	s	TANTALUM, CHIP 22uF 10% 10V
C28	1-135-164-21	s	TANTAL 22uF 20% 10V
C29	1-163-235-11	s	CERAMIC 22PF 5% 50V
C30	1-126-176-11	s	ELECT 220uF 20% 10V
C34	1-135-159-21	s	TANTALUM, CHIP 10uF 10% 20V
C36	1-135-159-21	s	TANTALUM, CHIP 10uF 10% 20V
C37	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C38	1-163-099-00	s	CERAMIC, CHIP 18PF 5% 50V
C39	1-135-164-21	s	TANTAL 22uF 20% 10V
C41	1-135-085-21	s	TANTALUM, CHIP 4.7uF 10% 25V
C42	1-131-381-00	s	TANTALUM 47uF 10% 10V
C44	1-126-176-11	s	ELECT 220uF 20% 10V
C46	1-135-159-21	s	TANTALUM, CHIP 10uF 10% 20V
C56	1-135-159-21	s	TANTALUM, CHIP 10uF 10% 20V
C60	1-135-159-21	s	TANTALUM, CHIP 10uF 10% 20V
C61	1-135-159-21	s	TANTALUM, CHIP 10uF 10% 20V
C63	1-163-245-11	s	CERAMIC 56PF 5% 50V
C64	1-163-241-11	s	CERAMIC, CHIP 39PF 5% 50V
C70	1-135-159-21	s	TANTALUM, CHIP 10uF 10% 20V
C81	1-135-085-21	s	TANTALUM, CHIP 4.7uF 10% 25V
C203	1-135-159-21	s	TANTALUM, CHIP 10uF 10% 20V
CN1	1-565-780-11	o	CONNECTOR,TX(P.L)(PC BOARD)50P
CP1	1-577-183-11	s	OSCILLATOR, CRYSTAL
D1	8-719-104-34	s	DIODE 1S2836
D2	8-719-104-34	s	DIODE 1S2836
DL1	1-415-370-11	s	DELAY LINE (340NS)
FL1	1-235-181-00	s	FILTER, BANDPASS 4.43MHz
IC1	8-759-710-24	s	IC NJM319M
IC2	8-759-300-71	s	IC MC14053BF
IC3	8-759-204-57	s	IC TC40H076AF
IC4	8-759-009-10	s	IC MC14069UBF
IC5	1-807-836-11	s	HYBRID-IC (SYNC SEP)

(ES-2(P) BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
IC6	1-808-513-12	s	IC IB-38
IC7	8-759-907-81	s	IC SN74LS221NS
IC8	8-741-134-00	s	IC BX-1340
IC9	1-808-514-11	s	IC IB-37
IC10	8-752-332-67	s	IC CXD1217M
IC11	8-759-209-90	s	IC TC4S71F
IC12	8-759-209-15	s	IC TC4SU69F
L1	1-408-781-00	s	CHIP 22uH
L2	1-408-777-00	s	CHIP 10uH
L3	1-408-781-00	s	CHIP 22uH
L4	1-408-781-00	s	CHIP 22uH
L6	1-408-781-00	s	CHIP 22uH
L7	1-408-781-00	s	CHIP 22uH
L8	1-408-781-00	s	CHIP 22uH
L9	1-408-785-21	s	CHIP 47uH
L10	1-408-781-00	s	CHIP 22uH
L11	1-408-785-21	s	CHIP 47uH
L12	1-408-785-21	s	CHIP 47uH
L13	1-408-783-00	s	CHIP 33uH
L14	1-408-785-21	s	CHIP 47uH
L15	1-408-785-21	s	CHIP 47uH
L16	1-408-785-21	s	CHIP 47uH
L17	1-408-785-21	s	CHIP 47uH
L18	1-408-783-00	s	CHIP 33uH
L19	1-408-785-21	s	CHIP 47uH
L20	1-408-785-21	s	CHIP 47uH
L101	1-408-777-00	s	CHIP 10uH
L201	1-408-785-21	s	CHIP 47uH
LV1	1-408-844-00	s	INDUCTOR, VAR, 22uH
Q1	8-729-402-84	s	TRANSISTOR XN4601
Q2	8-729-402-19	s	TRANSISTOR XN6501
Q3	8-729-122-63	s	TRANSISTOR 2SA1226
Q4	8-729-402-19	s	TRANSISTOR XN6501
Q5	8-729-402-78	s	TRANSISTOR XN6401
Q6	8-729-100-66	s	TRANSISTOR 2SC1623
Q7	8-729-175-73	s	TRANSISTOR 2SC2757
Q8	8-729-216-22	s	TRANSISTOR 2SA1162
Q9	8-729-402-19	s	TRANSISTOR XN6501
Q11	8-729-100-66	s	TRANSISTOR 2SC1623
Q12	8-729-402-19	s	TRANSISTOR XN6501
Q13	8-729-402-19	s	TRANSISTOR XN6501
Q14	8-729-216-22	s	TRANSISTOR 2SA1162
Q15	8-729-100-66	s	TRANSISTOR 2SC1623
Q20	8-729-109-41	s	TRANSISTOR 2SK94-X1
RV1	1-230-523-11	s	RES, ADJ, METAL 10K
RV2	1-230-519-11	s	RES, ADJ, METAL 470
RV3	1-230-521-11	s	RES, ADJ, METAL 2.2K
RV4	1-230-519-11	s	RES, ADJ, METAL 470
RV6	1-230-522-11	s	RES, ADJ, METAL 4.7K
RV7	1-230-521-11	s	RES, ADJ, METAL 2.2K

IE-29(P) BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-7515-230-A	o	MOUNTED CIRCUIT BOARD "IE-29(P)"
C1	1-124-584-00	s	ELECT 100uF 20% 10V
C5	1-163-227-11	s	CERAMIC 10PF 5% 50V
C7	1-131-377-00	s	TANTALUM 10uF 10% 10V
C12	1-131-365-00	s	TANTALUM 10uF 10% 20V
C18	1-163-100-00	s	CERAMIC, CHIP 20PF 5% 50V
C19	1-163-241-11	s	CERAMIC, CHIP 39PF 5% 50V
C21	1-124-584-00	s	ELECT 100uF 20% 10V
C23	1-124-589-11	s	ELECT 47uF 20% 16V
C24	1-124-589-11	s	ELECT 47uF 20% 16V
C26	1-126-096-11	s	ELECT 10uF 20% 35V
C28	1-131-347-00	s	TANTALUM 1uF 10% 35V
C29	1-131-365-00	s	TANTALUM 10uF 10% 20V
C33	1-163-227-11	s	CERAMIC 10PF 5% 50V
C34	1-163-103-00	s	CERAMIC, CHIP 27PF 5% 50V
C36	1-126-163-11	s	ELECT 4.7MF 20% 50V
C37	1-124-234-00	s	ELECT 22uF 20% 16V
C38	1-131-347-00	s	TANTALUM 1uF 10% 35V
C39	1-131-347-00	s	TANTALUM 1uF 10% 35V
C42	1-126-096-11	s	ELECT 10uF 20% 35V
C44	1-124-589-11	s	ELECT 47uF 20% 16V
C45	1-126-096-11	s	ELECT 10uF 20% 35V
C47	1-126-096-11	s	ELECT 10uF 20% 35V
C49	1-163-092-00	s	
C50	1-163-241-11	s	CERAMIC, CHIP 39PF 5% 50V
C51	1-163-115-00	s	CERAMIC, CHIP 82PF 5% 50V
C52	1-126-096-11	s	ELECT 10uF 20% 35V
C53	1-126-096-11	s	ELECT 10uF 20% 35V
C56	1-163-235-11	s	CERAMIC 22PF 5% 50V
C58	1-163-235-11	s	CERAMIC 22PF 5% 50V
C60	1-126-096-11	s	ELECT 10uF 20% 35V
C70	1-126-096-11	s	ELECT 10uF 20% 35V
C71	1-126-096-11	s	ELECT 10uF 20% 35V
C72	1-131-377-00	s	TANTALUM 10uF 10% 10V
C74	1-126-096-11	s	ELECT 10uF 20% 35V
C75	1-131-347-00	s	TANTALUM 1uF 10% 35V
C77	1-131-344-00	s	TANTALUM 0.33uF 10% 35V
C78	1-131-365-00	s	TANTALUM 10uF 10% 20V
C80	1-131-377-00	s	TANTALUM 10uF 10% 10V
C82	1-126-163-11	s	ELECT 4.7MF 20% 50V
C85	1-126-096-11	s	ELECT 10uF 20% 35V
C86	1-126-096-11	s	ELECT 10uF 20% 35V
C88	1-163-235-11	s	CERAMIC 22PF 5% 50V
C91	1-126-096-11	s	ELECT 10uF 20% 35V
C92	1-131-365-00	s	TANTALUM 10uF 10% 20V
C93	1-131-365-00	s	TANTALUM 10uF 10% 20V
C94	1-163-086-00	s	CERAMIC, CHIP 3PF 50V
C95	1-163-096-00	s	CERAMIC, CHIP 13PF 5% 50V
CN1	1-566-268-21	o	CONNECTOR, BOARD TO BOARD 6P
CN2	1-566-275-21	o	CONNECTOR, BOARD TO BOARD 13P
D1	8-719-800-76	s	DIODE 1SS226
D4	8-719-101-97	s	DIODE 1SS97-1
D5	8-719-101-97	s	DIODE 1SS97-1
DL1	1-415-305-81	s	DELAY LINE (1H)
IC1	8-759-981-51	s	IC RC1496M
IC2	8-759-031-58	s	IC SC7SU04F

(IE-29(P) BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
IC3	8-759-300-71	s	IC MC14053BF
IC4	8-759-300-71	s	IC MC14053BF
IC5	8-759-702-02	s	IC NJM062M
IC6	8-752-332-69	s	IC CXL5504M
IC7	8-759-926-28	s	IC SN74HC174NS
IC8	8-759-925-72	s	IC SN74HC02NS
IC9	8-759-925-72	s	IC SN74HC02NS
IC10	8-759-702-02	s	IC NJM062M
L1	1-408-425-00	s	INDUCTOR 220uH
L2	1-408-413-00	s	INDUCTOR 22uH
L3	1-408-413-00	s	INDUCTOR 22uH
L4	1-408-413-00	s	INDUCTOR 22uH
L5	1-408-413-00	s	INDUCTOR 22uH
L7	1-410-471-11	s	INDUCTOR 12uH
L8	1-408-414-00	s	INDUCTOR 27uH
L9	1-408-416-00	s	INDUCTOR 39uH
L11	1-408-414-00	s	INDUCTOR 27uH
L12	1-408-418-00	s	INDUCTOR 56uH
L13	1-408-429-00	s	INDUCTOR 470uH
L14	1-408-413-00	s	INDUCTOR 22uH
L15	1-408-413-00	s	INDUCTOR 22uH
L16	1-408-780-21	s	INDUCTOR CHIP 18uH
Q1	8-729-100-66	s	TRANSISTOR 2SC1623
Q2	8-729-175-73	s	TRANSISTOR 2SC2757
Q3	8-729-175-73	s	TRANSISTOR 2SC2757
Q4	8-729-122-63	s	TRANSISTOR 2SA1226
Q5	8-729-122-63	s	TRANSISTOR 2SA1226
Q6	8-729-175-73	s	TRANSISTOR 2SC2757
Q7	8-729-175-73	s	TRANSISTOR 2SC2757
Q8	8-729-109-41	s	TRANSISTOR 2SK94-X1
Q9	8-729-175-73	s	TRANSISTOR 2SC2757
Q10	8-729-175-73	s	TRANSISTOR 2SC2757
Q11	8-729-175-73	s	TRANSISTOR 2SC2757
Q12	8-729-175-73	s	TRANSISTOR 2SC2757
Q13	8-729-175-73	s	TRANSISTOR 2SC2757
Q14	8-729-175-73	s	TRANSISTOR 2SC2757
Q15	8-729-175-73	s	TRANSISTOR 2SC2757
Q16	8-729-100-66	s	TRANSISTOR 2SC1623
Q17	8-729-100-66	s	TRANSISTOR 2SC1623
Q18	8-729-216-22	s	TRANSISTOR 2SA1162
Q19	8-729-216-22	s	TRANSISTOR 2SA1162
Q21	8-729-100-66	s	TRANSISTOR 2SC1623
Q22	8-729-100-66	s	TRANSISTOR 2SC1623
Q23	8-729-216-22	s	TRANSISTOR 2SA1162
Q24	8-729-100-66	s	TRANSISTOR 2SC1623
Q25	8-729-100-66	s	TRANSISTOR 2SC1623
Q26	8-729-216-22	s	TRANSISTOR 2SA1162
Q27	8-729-216-22	s	TRANSISTOR 2SA1162
Q28	8-729-100-66	s	TRANSISTOR 2SC1623
Q29	8-729-100-66	s	TRANSISTOR 2SC1623
Q30	8-729-100-66	s	TRANSISTOR 2SC1623
Q31	8-729-100-66	s	TRANSISTOR 2SC1623
Q32	8-729-100-66	s	TRANSISTOR 2SC1623
Q33	8-729-100-66	s	TRANSISTOR 2SC1623
Q34	8-729-100-66	s	TRANSISTOR 2SC1623
Q35	8-729-100-66	s	TRANSISTOR 2SC1623
Q36	8-729-100-66	s	TRANSISTOR 2SC1623
Q37	8-729-100-66	s	TRANSISTOR 2SC1623

(IE-29(P) BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
Q38	8-729-109-41	s	TRANSISTOR 2SK94-X1
Q39	8-729-100-66	s	TRANSISTOR 2SC1623
Q40	8-729-216-22	s	TRANSISTOR 2SA1162
Q41	8-729-175-73	s	TRANSISTOR 2SC2757
Q42	8-729-175-73	s	TRANSISTOR 2SC2757
Q43	8-729-100-66	s	TRANSISTOR 2SC1623
Q44	8-729-216-22	s	TRANSISTOR 2SA1162
Q45	8-729-216-22	s	TRANSISTOR 2SA1162
Q46	8-729-100-66	s	TRANSISTOR 2SC1623
Q48	8-729-100-66	s	TRANSISTOR 2SC1623
Q49	8-729-100-66	s	TRANSISTOR 2SC1623
Q50	8-729-216-22	s	TRANSISTOR 2SA1162
Q51	8-729-100-66	s	TRANSISTOR 2SC1623
Q52	8-729-100-66	s	TRANSISTOR 2SC1623
Q53	8-729-216-22	s	TRANSISTOR 2SA1162
Q54	8-729-216-22	s	TRANSISTOR 2SA1162
Q55	8-729-216-22	s	TRANSISTOR 2SA1162
Q56	8-729-100-66	s	TRANSISTOR 2SC1623
Q57	8-729-175-73	s	TRANSISTOR 2SC2757
R43	1-216-654-11	s	METAL, CHIP 1.3K 0.5% 1/10W
RV1	1-226-703-11	s	RES, ADJ, METAL 10K
RV2	1-226-771-11	s	RES, ADJ, METAL 1K
RV3	1-238-221-11	s	RES, ADJ, METAL 2.2K
RV4	1-228-519-00	s	RES, ADJ, METAL 2.2K
RV5	1-226-770-11	s	RES, ADJ, METAL 470
RV6	1-237-603-11	s	RES, ADJ, METAL 2.2K
S1	1-553-977-00	s	SWITCH, SLIDE

MB-325(P) BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-7515-213-A	o	MOUNTED CIRCUIT BOARD "MB-325(P)"
C1	1-124-584-00	s	ELECT 100uF 20% 10V
C3	1-124-148-00	s	ELECT 100uF 20% 25V
C7	1-124-148-00	s	ELECT 100uF 20% 25V
C8	1-124-148-00	s	ELECT 100uF 20% 25V
C9	1-163-227-11	s	CERAMIC 10PF 5% 50V
C18	1-135-159-21	s	TANTALUM, CHIP 10uF 10% 20V
C19	1-135-216-11	s	TANTAL 10uF 20% 10V
C21	1-135-216-11	s	TANTAL 10uF 20% 10V
CN1	1-565-781-11	o	CONNECTOR,TX(S.S)(PC BOARD)50P
CN2	1-565-781-11	o	CONNECTOR,TX(S.S)(PC BOARD)50P
CN3	1-566-579-11	o	CONNECTOR, MULTI 50P
CN4	1-566-516-11	s	CONNECTOR, FPC (ZIF) 16P
CN5	1-506-490-21	s	CONNECTOR, 11P, MALE
CN6	1-506-471-11	o	CONNECTOR, 6P, MALE
CN7	1-566-199-11	o	PIN, CONNECTOR (PC BOARD) 6P
CN8	1-506-467-11	o	CONNECTOR, 2P, MALE
CN9	1-506-487-11	o	CONNECTOR, 8P, MALE
	1-569-202-31	o	HOUSING, CONNECTOR 9P
	1-569-191-11	o	TERMINAL, SOLDERLESS
	1-569-193-11	s	CONTACT
CN10	1-560-356-00	o	CONNECTOR POST HEADER, ILG (2P) MAL
	1-561-514-00	o	HOUSING, ILG 2P FEMALE
	1-560-372-00	o	CONTACT, AWG22-28
CN11	1-506-468-11	o	CONNECTOR, 3P, MALE
CN13	1-506-488-11	s	CONNECTOR, 9P, MALE
CN14	1-506-481-11	o	CONNECTOR, 2P, MALE
CN15	1-506-481-11	o	CONNECTOR, 2P, MALE
CN16	1-506-481-11	o	CONNECTOR, 2P, MALE
CN17	1-506-481-11	o	CONNECTOR, 2P, MALE
	1-562-147-11	s	HOUSING, 2P
	1-569-193-11	s	CONTACT
CN19	1-506-472-11	o	CONNECTOR, 7P, MALE
CN21	1-506-482-11	o	CONNECTOR, 3P, MALE
CN22	1-565-210-11	s	CONNECTOR, FPC (ZIF) 30P
D1	8-719-815-85	s	DIODE 1S1585
D2	8-719-815-85	s	DIODE 1S1585
D3	8-719-105-90	s	DIODE RD5.6M-B1
IC1	8-759-209-90	s	IC TC4S71F
IC2	8-759-209-69	s	IC TC4S11F
IC3	8-759-150-17	s	IC CXD8154M
L1	1-408-096-00	s	470uH
L2	1-408-096-00	s	470uH
L4	1-408-767-21	s	INDUCTOR CHIP 1.5uH
PU1	1-466-426-11	s	CONVERTER UNIT, DC-DC
Q1	8-729-100-66	s	TRANSISTOR 2SC1623
Q2	8-729-100-66	s	TRANSISTOR 2SC1623
Q3	8-729-100-66	s	TRANSISTOR 2SC1623
Q4	8-729-100-66	s	TRANSISTOR 2SC1623
Q5	8-729-216-22	s	TRANSISTOR 2SA1162
Q6	8-729-109-41	s	TRANSISTOR 2SK94-X1
Q7	8-729-100-66	s	TRANSISTOR 2SC1623
Q8	8-729-140-75	s	TRANSISTOR 2SD999-CLC
Q9	8-729-101-07	s	TRANSISTOR 2SB798
Q10	8-729-216-22	s	TRANSISTOR 2SA1162

(MB-325(P) BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
Q11	8-729-100-66	s	TRANSISTOR 2SC1623
Q12	8-729-216-22	s	TRANSISTOR 2SA1162
Q13	8-729-100-66	s	TRANSISTOR 2SC1623
Q14	8-729-216-22	s	TRANSISTOR 2SA1162
R21	1-249-399-11	s	CARBON 33 5% 1/4W
R22	1-249-399-11	s	CARBON 33 5% 1/4W
R27 ⚠	1-216-369-00	s	METAL 1 5% 2W
S1	1-553-977-00	s	SWITCH, SLIDE
S2	1-553-977-00	s	SWITCH, SLIDE

MX-18 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
C1	1-163-224-11	s	CERAMIC 7PF 0.25PF 50V
C3	1-163-099-00	s	CERAMIC, CHIP 18PF 5% 50V
C4	1-135-159-21	s	TANTALUM, CHIP 10uF 10% 20V
C11	1-135-164-21	s	TANTAL 22uF 20% 10V
CN1	1-566-095-11	s	PIN, BOARD TO BOARD 5P
CN2	1-566-095-11	s	PIN, BOARD TO BOARD 5P
L1	1-408-795-21	s	CHIP 330uH
L2	1-408-795-21	s	CHIP 330uH
Q1	8-729-403-29	s	TRANSISTOR XN6435
Q2	8-729-402-16	s	TRANSISTOR XN4608
Q3	8-729-402-19	s	TRANSISTOR XN6501
Q4	8-729-100-66	s	TRANSISTOR 2SC1623
Q5	8-729-402-78	s	TRANSISTOR XN6401
Q6	8-729-402-19	s	TRANSISTOR XN6501
Q7	8-729-100-66	s	TRANSISTOR 2SC1623
Q8	8-729-216-22	s	TRANSISTOR 2SA1162
Q9	8-729-402-78	s	TRANSISTOR XN6401
R1	1-218-254-11	s	METAL CHIP 2.55K 0.50% 1/10W
R2	1-218-257-11	s	METAL CHIP 4.99K 0.50% 1/10W
R3	1-218-259-11	s	METAL CHIP 13.7K 0.50% 1/10W
R12	1-218-254-11	s	METAL CHIP 2.55K 0.50% 1/10W
R13	1-218-259-11	s	METAL CHIP 13.7K 0.50% 1/10W
R26	1-218-254-11	s	METAL CHIP 2.55K 0.50% 1/10W
R27	1-218-257-11	s	METAL CHIP 4.99K 0.50% 1/10W
RV1	1-238-220-11	s	RES, ADJ, METAL 1K
RV2	1-238-222-11	s	RES, ADJ, METAL 4.7K
RV3	1-238-221-11	s	RES, ADJ, METAL 2.2K
RV4	1-238-219-11	s	RES, VAR, METAL 470

PA-106 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-7515-218-A	o	MOUNTED CIRCUIT BOARD "PA-106"
2pcs	1-565-164-11	o	CONTACT, FEMALE AWG26-28
2pcs	1-566-987-11	o	CONTACT, AWG28-32
1pc	1-569-193-11	s	CONTACT
C1	1-135-154-21	s	TANTAL 3.3uF 20% 20V
C2	1-135-152-21	s	TANTAL 1.5uF 10% 25V
C3	1-135-166-21	s	TANTALUM, CHIP 47uF 10% 10V
C4	1-135-177-21	s	TANTALUM CHIP 1uF 10% 25V
C6	1-135-164-21	s	TANTAL 22uF 20% 10V
C8	1-135-164-21	s	TANTAL 22uF 20% 10V
C9	1-163-037-11	s	CERAMIC, CHIP 0.022uF 10% 25V
C19	1-135-211-11	s	TANTAL 6.8uF 20% 6.3VW
C22	1-163-037-11	s	CERAMIC, CHIP 0.022uF 10% 25V
C27	1-135-091-00	s	TANTALUN, CHIP 1uF 10% 16V
C30	1-135-215-21	s	TANTAL 6.8uF 20% 16V
C31	1-124-584-00	s	ELECT 100uF 20% 10V
CN1	1-565-794-11	o	HOUSING, 13P
CN2	1-566-989-11	o	HOUSING, 3P
CN7	1-565-132-11	o	HOUSING, 13P
CN8	1-565-122-11	o	HOUSING, 3P
CN14	1-562-147-11	s	HOUSING, 2P
Q1	8-729-175-73	s	TRANSISTOR 2SC2757
Q2	8-729-216-22	s	TRANSISTOR 2SA1162
Q3	8-765-930-08	s	TRANSISTOR 3SK163-2
Q4	8-729-100-66	s	TRANSISTOR 2SC1623
Q5	8-729-216-22	s	TRANSISTOR 2SA1162
Q6	8-765-930-08	s	TRANSISTOR 3SK163-2
Q10	8-729-100-66	s	TRANSISTOR 2SC1623
Q11	8-729-216-22	s	TRANSISTOR 2SA1162
Q12	8-765-930-08	s	TRANSISTOR 3SK163-2
Q13	8-729-100-66	s	TRANSISTOR 2SC1623
Q17	8-729-100-66	s	TRANSISTOR 2SC1623
Q18	8-729-100-66	s	TRANSISTOR 2SC1623
Q19	8-729-100-66	s	TRANSISTOR 2SC1623
Q20	8-729-100-66	s	TRANSISTOR 2SC1623
Q21	8-729-216-22	s	TRANSISTOR 2SA1162
Q22	8-729-100-66	s	TRANSISTOR 2SC1623
Q24	8-729-100-66	s	TRANSISTOR 2SC1623

PA-107B BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-7515-220-A	o	MOUNTED CIRCUIT BOARD "PA-107B"
2pcs	1-565-164-11	o	CONTACT, FEMALE AWG26-28
2pcs	1-566-987-11	o	CONTACT, AWG28-32
1pc	1-569-193-11	s	CONTACT
C1	1-135-154-21	s	TANTAL 3.3uF 20% 20V
C2	1-135-152-21	s	TANTAL 1.5uF 10% 25V
C3	1-135-166-21	s	TANTALUM, CHIP 47uF 10% 10V
C4	1-135-177-21	s	TANTALUM CHIP 1uF 10% 25V
C6	1-135-164-21	s	TANTAL 22uF 20% 10V
C8	1-135-164-21	s	TANTAL 22uF 20% 10V
C9	1-163-037-11	s	CERAMIC, CHIP 0.022uF 10% 25V
C19	1-135-211-11	s	TANTAL 6.8uF 20% 6.3VW
C22	1-163-037-11	s	CERAMIC, CHIP 0.022uF 10% 25V
C27	1-135-091-00	s	TANTALUN, CHIP 1uF 10% 16V
C30	1-135-089-21	s	TANTALUM, CHIP 6.8uF 10% 20V
C31	1-124-584-00	s	ELECT 100uF 20% 10V
CN1	1-565-794-11	o	HOUSING, 13P
CN2	1-566-989-11	o	HOUSING, 3P
CN7	1-565-132-11	o	HOUSING, 13P
CN8	1-565-122-11	o	HOUSING, 3P
CN16	1-562-147-11	s	HOUSING, 2P
Q1	8-729-175-73	s	TRANSISTOR 2SC2757
Q2	8-729-216-22	s	TRANSISTOR 2SA1162
Q3	8-765-930-08	s	TRANSISTOR 3SK163-2
Q4	8-729-100-66	s	TRANSISTOR 2SC1623
Q5	8-729-216-22	s	TRANSISTOR 2SA1162
Q9	8-765-930-08	s	TRANSISTOR 3SK163-2
Q10	8-729-100-66	s	TRANSISTOR 2SC1623
Q11	8-729-216-22	s	TRANSISTOR 2SA1162
Q15	8-765-930-08	s	TRANSISTOR 3SK163-2
Q16	8-729-100-66	s	TRANSISTOR 2SC1623
Q17	8-729-100-66	s	TRANSISTOR 2SC1623
Q18	8-729-100-66	s	TRANSISTOR 2SC1623
Q19	8-729-100-66	s	TRANSISTOR 2SC1623
Q20	8-729-100-66	s	TRANSISTOR 2SC1623
Q21	8-729-216-22	s	TRANSISTOR 2SA1162
Q22	8-729-100-66	s	TRANSISTOR 2SC1623
Q24	8-729-100-66	s	TRANSISTOR 2SC1623
R33	1-216-628-11	s	METAL, CHIP 110 0.5% 1/10W

PA-107G BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-7515-219-A	o	MOUNTED CIRCUIT BOARD "PA-107G"
2pcs	1-565-164-11	o	CONTACT, FEMALE AWG26-28
2pcs	1-566-987-11	o	CONTACT, AWG28-32
1pc	1-569-193-11	s	CONTACT
C1	1-135-154-21	s	TANTAL 3.3uF 20% 20V
C2	1-135-152-21	s	TANTAL 1.5uF 10% 25V
C3	1-135-166-21	s	TANTALUM, CHIP 47uF 10% 10V
C4	1-135-177-21	s	TANTALUM CHIP 1uF 10% 25V
C6	1-135-164-21	s	TANTAL 22uF 20% 10V
C8	1-135-164-21	s	TANTAL 22uF 20% 10V
C9	1-163-037-11	s	CERAMIC, CHIP 0.022uF 10% 25V
C19	1-135-211-11	s	TANTAL 6.8uF 20% 6.3VW
C22	1-163-037-11	s	CERAMIC, CHIP 0.022uF 10% 25V
C27	1-135-091-00	s	TANTALUN, CHIP 1uF 10% 16V
C30	1-135-089-21	s	TANTALUM, CHIP 6.8uF 10% 20V
C31	1-124-584-00	s	ELECT 100uF 20% 10V
CN1	1-565-794-11	o	HOUSING, 13P
CN2	1-566-990-11	o	HOUSING, 4P
CN6	1-565-123-11	o	HOUSING, 4P
CN7	1-565-132-11	o	HOUSING, 13P
CN15	1-562-147-11	s	HOUSING, 2P
Q1	8-729-175-73	s	TRANSISTOR 2SC2757
Q2	8-729-216-22	s	TRANSISTOR 2SA1162
Q3	8-765-930-08	s	TRANSISTOR 3SK163-2
Q4	8-729-100-66	s	TRANSISTOR 2SC1623
Q5	8-729-216-22	s	TRANSISTOR 2SA1162
Q6	8-765-930-08	s	TRANSISTOR 3SK163-2
Q7	8-729-100-66	s	TRANSISTOR 2SC1623
Q8	8-729-216-22	s	TRANSISTOR 2SA1162
Q9	8-765-930-08	s	TRANSISTOR 3SK163-2
Q10	8-729-100-66	s	TRANSISTOR 2SC1623
Q11	8-729-216-22	s	TRANSISTOR 2SA1162
Q12	8-765-930-08	s	TRANSISTOR 3SK163-2
Q13	8-729-100-66	s	TRANSISTOR 2SC1623
Q14	8-729-216-22	s	TRANSISTOR 2SA1162
Q15	8-765-930-08	s	TRANSISTOR 3SK163-2
Q16	8-729-100-66	s	TRANSISTOR 2SC1623
Q17	8-729-100-66	s	TRANSISTOR 2SC1623
Q18	8-729-100-66	s	TRANSISTOR 2SC1623
Q19	8-729-100-66	s	TRANSISTOR 2SC1623
Q20	8-729-100-66	s	TRANSISTOR 2SC1623
Q21	8-729-216-22	s	TRANSISTOR 2SA1162
Q22	8-729-100-66	s	TRANSISTOR 2SC1623
Q24	8-729-100-66	s	TRANSISTOR 2SC1623
R33	1-216-632-11	s	METAL, CHIP 160 0.5% 1/10W

PR-147 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
C2	1-135-091-00	s	TANTALUN, CHIP 1uF 10% 16V
C3	1-135-091-00	s	TANTALUN, CHIP 1uF 10% 16V
C4	1-135-091-00	s	TANTALUN, CHIP 1uF 10% 16V
C9	1-163-224-11	s	CERAMIC 7PF 0.25PF 50V
C12	1-135-159-21	s	TANTALUM, CHIP 10uF 10% 20V
C14	1-163-235-11	s	CERAMIC 22PF 5% 50V
C15	1-163-088-00	s	CERAMIC, CHIP 5PF 50V
C16	1-135-216-11	s	TANTAL 10uF 20% 10V
C17	1-135-216-11	s	TANTAL 10uF 20% 10V
C18	1-163-235-11	s	CERAMIC 22PF 5% 50V
CN1	1-566-095-11	s	PIN, BOARD TO BOARD 5P
CN2	1-566-095-11	s	PIN, BOARD TO BOARD 5P
D1	8-719-104-34	s	DIODE 1S2836
D2	8-719-104-34	s	DIODE 1S2836
D3	8-719-104-34	s	DIODE 1S2836
IC1	8-759-906-53	s	IC TL062CPS
Q1	8-729-175-73	s	TRANSISTOR 2SC2757
Q2	8-729-100-66	s	TRANSISTOR 2SC1623
Q3	8-729-175-73	s	TRANSISTOR 2SC2757
Q4	8-729-175-73	s	TRANSISTOR 2SC2757
Q5	8-729-175-73	s	TRANSISTOR 2SC2757
Q6	8-729-109-41	s	TRANSISTOR 2SK94-X1
Q7	8-729-122-63	s	TRANSISTOR 2SA1226
Q8	8-729-100-66	s	TRANSISTOR 2SC1623
Q9	8-729-402-78	s	TRANSISTOR XN6401
Q10	8-729-403-29	s	TRANSISTOR XN6435
Q11	8-729-403-32	s	TRANSISTOR XN6534
RV1	1-238-219-11	s	RES, VAR, METAL 470
RV2	1-238-222-11	s	RES, ADJ, METAL 4.7K

PR-148(P) BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-7515-224-A	o	MOUNTED CIRCUIT BOARD "PR-148(P)"
C1	1-126-157-11	s	ELECT 10uF 20% 16V
C9	1-163-227-11	s	CERAMIC 10PF 5% 50V
C14	1-124-589-11	s	ELECT 47uF 20% 16V
C24	1-124-472-11	s	ELECT 470uF 20% 10V
C25	1-124-471-00	s	ELECT 1000uF 20% 6.3V
C26	1-124-471-00	s	ELECT 1000uF 20% 6.3V
C37	1-126-157-11	s	ELECT 10uF 20% 16V
C39	1-124-589-11	s	ELECT 47uF 20% 16V
C41	1-126-157-11	s	ELECT 10uF 20% 16V
C42	1-126-157-11	s	ELECT 10uF 20% 16V
C43	1-126-157-11	s	ELECT 10uF 20% 16V
C44	1-124-472-11	s	ELECT 470uF 20% 10V
C50	1-163-251-11	s	CERAMIC 100PF 5% 50V
CN1	1-563-679-21	o	CONNECTOR, BOARD TO BOARD 6P
CN2	1-563-686-21	o	CONNECTOR, BOARD TO BOARD 13P
CN3	1-565-780-11	o	CONNECTOR,TX(P.L)(PC BOARD)50P
D1	8-719-400-18	s	DIODE MA152WK
D2	8-719-400-18	s	DIODE MA152WK
D3	8-719-104-34	s	DIODE 1S2836
D4	8-719-104-34	s	DIODE 1S2836
D6	8-719-914-12	s	DIODE HZ4BLL
D7	8-719-914-12	s	DIODE HZ4BLL
D8	8-719-914-12	s	DIODE HZ4BLL
D9	8-719-104-34	s	DIODE 1S2836
D10	8-719-104-34	s	DIODE 1S2836
DL1	1-415-307-00	s	165nS
DL2	1-415-307-00	s	165nS
DL3	1-415-307-00	s	165nS
IC1	8-759-204-40	s	IC TC40H027F
IC2	8-759-201-50	s	IC TC40H193F
IC3	8-759-906-54	s	IC TL064CNS
IC4	8-759-201-53	s	IC TC40H000F
IC5	8-759-209-97	s	IC TC4S81F
IC6	8-759-209-97	s	IC TC4S81F
IC7	8-759-209-97	s	IC TC4S81F
IC8	8-759-300-71	s	IC MC14053BF
IC9	8-759-209-97	s	IC TC4S81F
IC10	8-759-209-69	s	IC TC4S11F
IC11	8-759-209-97	s	IC TC4S81F
IC12	8-759-209-54	s	IC TC4S01F
IC13	8-759-209-15	s	IC TC4SU69F
LP1	1-409-427-11	s	FILTER, TRAP 14.3MHz
Q1	8-729-216-22	s	TRANSISTOR 2SA1162
Q2	8-729-109-41	s	TRANSISTOR 2SK94-X1
Q3	8-729-100-66	s	TRANSISTOR 2SC1623
Q4	8-729-100-66	s	TRANSISTOR 2SC1623
Q5	8-729-100-66	s	TRANSISTOR 2SC1623
Q6	8-729-100-66	s	TRANSISTOR 2SC1623
Q7	8-729-901-46	s	TRANSISTOR DTA114YK
Q8	8-729-900-52	s	TRANSISTOR DTC114YK
Q9	8-729-900-52	s	TRANSISTOR DTC114YK
Q10	8-729-216-22	s	TRANSISTOR 2SA1162
Q11	8-729-216-22	s	TRANSISTOR 2SA1162
Q12	8-729-216-22	s	TRANSISTOR 2SA1162
Q13	8-729-100-66	s	TRANSISTOR 2SC1623

(PR-148(P) BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
Q19	8-729-100-66	s	TRANSISTOR 2SC1623
Q20	8-729-100-66	s	TRANSISTOR 2SC1623
Q21	8-729-100-66	s	TRANSISTOR 2SC1623
Q22	8-729-100-66	s	TRANSISTOR 2SC1623
Q23	8-729-100-66	s	TRANSISTOR 2SC1623
Q24	8-729-100-66	s	TRANSISTOR 2SC1623
Q25	8-729-100-66	s	TRANSISTOR 2SC1623
Q26	8-729-901-46	s	TRANSISTOR DTA114YK
Q31	8-729-216-22	s	TRANSISTOR 2SA1162
Q32	8-729-100-66	s	TRANSISTOR 2SC1623
Q33	8-729-100-66	s	TRANSISTOR 2SC1623
Q34	8-729-109-41	s	TRANSISTOR 2SK94-X1
RV1	1-226-703-11	s	RES, ADJ, METAL 10K
RV2	1-226-771-11	s	RES, ADJ, METAL 1K
RV3	1-226-771-11	s	RES, ADJ, METAL 1K
RV4	1-226-771-11	s	RES, ADJ, METAL 1K
RV5	1-226-771-11	s	RES, ADJ, METAL 1K
RV6	1-238-222-11	s	RES, ADJ, METAL 4.7K
RV7	1-238-222-11	s	RES, ADJ, METAL 4.7K
RV8	1-238-222-11	s	RES, ADJ, METAL 4.7K
RV9	1-226-702-00	s	RES, ADJ, METAL 2.2K
RV10	1-226-702-00	s	RES, ADJ, METAL 2.2K
RV11	1-226-702-00	s	RES, ADJ, METAL 2.2K
RV12	1-238-225-11	s	RES, ADJ, METAL 47K
RV13	1-238-225-11	s	RES, ADJ, METAL 47K
RV14	1-238-225-11	s	RES, ADJ, METAL 47K
RV15	1-238-225-11	s	RES, ADJ, METAL 47K
RV16	1-238-225-11	s	RES, ADJ, METAL 47K
RV17	1-238-225-11	s	RES, ADJ, METAL 47K
RV18	1-238-225-11	s	RES, ADJ, METAL 47K
RV19	1-238-225-11	s	RES, ADJ, METAL 47K
RV20	1-238-225-11	s	RES, ADJ, METAL 47K
RV21	1-238-225-11	s	RES, ADJ, METAL 47K
RV22	1-238-225-11	s	RES, ADJ, METAL 47K

SW-445 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-7520-515-A	o	MOUNTED CIRCUIT BOARD "SW-445"
1pc	1-569-193-11	s	CONTACT
CN3	1-569-195-11	o	HOUSING, CONNECTOR 2P
CN8	1-569-195-11	o	HOUSING, CONNECTOR 2P
S1	1-553-739-21	s	SWITCH, TACTILE
S2	1-553-739-21	s	SWITCH, TACTILE
S3	1-553-739-21	s	SWITCH, TACTILE
SW001	1-554-486-00	s	SWITCH, TOGGLE

SW-446 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-7520-516-A	o	MOUNTED CIRCUIT BOARD "SW-446"
1pc	1-562-736-11	o	HOUSING, 3P
1pc	1-564-831-11	o	CONTACT, FEMALE
1pc	1-569-193-11	s	CONTACT
CN4	1-569-196-11	o	HOUSING, 3P
S1	1-570-985-11	s	SWITCH, TOGGLE
S2	1-570-985-11	s	SWITCH, TOGGLE

TG-72(P) BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-7515-217-A	o	MOUNTED CIRCUIT BOARD "TG-72(P)"
C4	1-163-251-11	s	CERAMIC 100PF 5% 50V
C7	1-135-125-21	s	TANTALUM, CHIP 33uF 20% 10V
C9	1-135-161-21	s	TANTALUM, CHIP 22uF 10% 10V
C19	1-135-125-21	s	TANTALUM, CHIP 33uF 20% 10V
CN1	1-563-684-31	o	CONNECTOR, BOARD TO BOARD 11P
CN2	1-563-685-31	o	CONNECTOR, BOARD TO BOARD 12P
CN3	1-563-684-31	o	CONNECTOR, BOARD TO BOARD 11P
CN4	1-563-684-31	o	CONNECTOR, BOARD TO BOARD 11P
CP1	1-577-182-11	s	OSCILLATOR, CRYSTAL 28.375MHz
IC1	8-752-333-20	s	IC CXD1255Q
IC2	8-759-925-83	s	IC SN74HC27NS
IC3	8-759-985-18	s	IC 74AC08SJ
IC4	8-759-925-74	s	IC SN74HC04NS
IC5	8-759-925-76	s	IC SN74HC08NS
IC6	8-759-031-43	s	IC SC14S81F
L1	1-408-781-00	s	CHIP 22uH
L2	1-408-781-00	s	CHIP 22uH

VA-105B BOARD

Ref. No. or Q'ty	Part No.	SP	Description
C1	1-163-235-11	s	CERAMIC 22PF 5% 50V
C2	1-163-088-00	s	CERAMIC, CHIP 5PF 50V
C3	1-163-088-00	s	CERAMIC, CHIP 5PF 50V
C9	1-135-216-11	s	TANTAL 10uF 20% 10V
C10	1-135-216-11	s	TANTAL 10uF 20% 10V
C13	1-163-088-00	s	CERAMIC, CHIP 5PF 50V
C14	1-135-159-21	s	TANTALUM, CHIP 10uF 10% 20V
C15	1-135-072-21	s	TANTALUM, CHIP 0.22uF 10% 35V
C18	1-135-149-21	s	TANTALUM, CHIP 2.2uF 10% 10V
C19	1-163-251-11	s	CERAMIC 100PF 5% 50V
C20	1-135-072-21	s	TANTALUM, CHIP 0.22uF 10% 35V
C21	1-135-145-11	s	TANTALUM, CHIP 0.47uF 10% 35V
C23	1-135-216-11	s	TANTAL 10uF 20% 10V
CN1	1-566-095-11	s	PIN, BOARD TO BOARD 5P
CN2	1-566-095-11	s	PIN, BOARD TO BOARD 5P
D4	8-719-104-34	s	DIODE 1S2836
D5	8-719-104-34	s	DIODE 1S2836
IC1	8-759-981-51	s	IC RC1496M
IC2	8-759-906-53	s	IC TL062CPS
Q1	8-729-109-41	s	TRANSISTOR 2SK94-X1
Q2	8-729-109-41	s	TRANSISTOR 2SK94-X1
Q3	8-729-100-66	s	TRANSISTOR 2SC1623
Q4	8-729-100-66	s	TRANSISTOR 2SC1623
Q5	8-729-122-63	s	TRANSISTOR 2SA1226
Q6	8-729-100-66	s	TRANSISTOR 2SC1623
Q7	8-729-216-22	s	TRANSISTOR 2SA1162
Q8	8-729-402-19	s	TRANSISTOR XN6501
Q9	8-729-109-41	s	TRANSISTOR 2SK94-X1
Q11	8-729-109-41	s	TRANSISTOR 2SK94-X1
Q14	8-729-122-63	s	TRANSISTOR 2SA1226
Q15	8-729-175-73	s	TRANSISTOR 2SC2757
Q17	8-729-216-22	s	TRANSISTOR 2SA1162
Q18	8-729-109-41	s	TRANSISTOR 2SK94-X1
R18	1-216-654-11	s	METAL, CHIP 1.3K 0.5% 1/10W

VA-105G BOARD

Ref. No. or Q'ty	Part No.	SP	Description
C1	1-163-235-11	s	CERAMIC 22PF 5% 50V
C9	1-135-216-11	s	TANTAL 10uF 20% 10V
C10	1-135-216-11	s	TANTAL 10uF 20% 10V
C13	1-163-088-00	s	CERAMIC, CHIP 5PF 50V
C14	1-135-159-21	s	TANTALUM, CHIP 10uF 10% 20V
C15	1-135-072-21	s	TANTALUM, CHIP 0.22uF 10% 35V
C18	1-135-149-21	s	TANTALUM, CHIP 2.2uF 10% 10V
C19	1-163-251-11	s	CERAMIC 100PF 5% 50V
C20	1-135-072-21	s	TANTALUM, CHIP 0.22uF 10% 35V
C21	1-135-145-11	s	TANTALUM, CHIP 0.47uF 10% 35V
C23	1-135-216-11	s	TANTAL 10uF 20% 10V
C25	1-163-086-00	s	CERAMIC, CHIP 3PF 50V
CN1	1-566-095-11	s	PIN, BOARD TO BOARD 5P
CN2	1-566-095-11	s	PIN, BOARD TO BOARD 5P
D4	8-719-104-34	s	DIODE 1S2836
D5	8-719-104-34	s	DIODE 1S2836
IC1	8-759-981-51	s	IC RC1496M
IC2	8-759-906-53	s	IC TL062CPS
Q1	8-729-109-41	s	TRANSISTOR 2SK94-X1
Q2	8-729-109-41	s	TRANSISTOR 2SK94-X1
Q3	8-729-100-66	s	TRANSISTOR 2SC1623
Q4	8-729-100-66	s	TRANSISTOR 2SC1623
Q5	8-729-122-63	s	TRANSISTOR 2SA1226
Q6	8-729-100-66	s	TRANSISTOR 2SC1623
Q7	8-729-216-22	s	TRANSISTOR 2SA1162
Q8	8-729-402-19	s	TRANSISTOR XN6501
Q9	8-729-109-41	s	TRANSISTOR 2SK94-X1
Q11	8-729-109-41	s	TRANSISTOR 2SK94-X1
Q14	8-729-122-63	s	TRANSISTOR 2SA1226
Q15	8-729-175-73	s	TRANSISTOR 2SC2757
Q17	8-729-216-22	s	TRANSISTOR 2SA1162
Q18	8-729-109-41	s	TRANSISTOR 2SK94-X1
R18	1-216-654-11	s	METAL, CHIP 1.3K 0.5% 1/10W

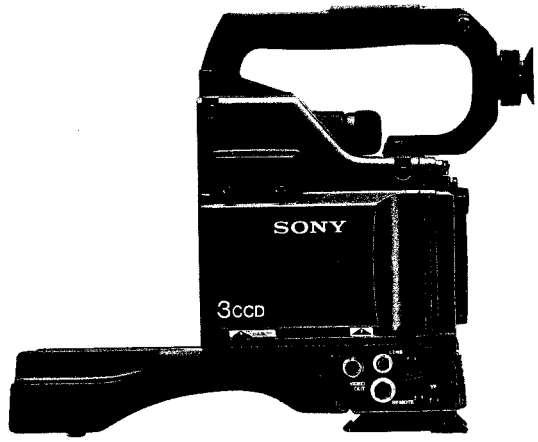
VA-105R BOARD

Ref. No. or Q'ty	Part No.	SP	Description
C1	1-163-235-11	s	CERAMIC 22PF 5% 50V
C9	1-135-216-11	s	TANTAL 10uF 20% 10V
C10	1-135-216-11	s	TANTAL 10uF 20% 10V
C13	1-163-088-00	s	CERAMIC, CHIP 5PF 50V
C14	1-135-159-21	s	TANTALUM, CHIP 10uF 10% 20V
C15	1-135-072-21	s	TANTALUM, CHIP 0.22uF 10% 35V
C18	1-135-149-21	s	TANTALUM, CHIP 2.2uF 10% 10V
C19	1-163-251-11	s	CERAMIC 100PF 5% 50V
C20	1-135-072-21	s	TANTALUM, CHIP 0.22uF 10% 35V
C21	1-135-145-11	s	TANTALUM, CHIP 0.47uF 10% 35V
C23	1-135-216-11	s	TANTAL 10uF 20% 10V
C25	1-163-086-00	s	CERAMIC, CHIP 3PF 50V
CN1	1-566-095-11	s	PIN, BOARD TO BOARD 5P
CN2	1-566-095-11	s	PIN, BOARD TO BOARD 5P
D4	8-719-104-34	s	DIODE 1S2836
D5	8-719-104-34	s	DIODE 1S2836
IC1	8-759-981-51	s	IC RC1496M
IC2	8-759-906-53	s	IC TL062CPS
Q1	8-729-109-41	s	TRANSISTOR 2SK94-X1
Q2	8-729-109-41	s	TRANSISTOR 2SK94-X1
Q3	8-729-100-66	s	TRANSISTOR 2SC1623
Q4	8-729-100-66	s	TRANSISTOR 2SC1623
Q5	8-729-122-63	s	TRANSISTOR 2SA1226
Q6	8-729-100-66	s	TRANSISTOR 2SC1623
Q7	8-729-216-22	s	TRANSISTOR 2SA1162
Q8	8-729-402-19	s	TRANSISTOR XN6501
Q9	8-729-109-41	s	TRANSISTOR 2SK94-X1
Q11	8-729-109-41	s	TRANSISTOR 2SK94-X1
Q14	8-729-122-63	s	TRANSISTOR 2SA1226
Q15	8-729-175-73	s	TRANSISTOR 2SC2757
Q17	8-729-216-22	s	TRANSISTOR 2SA1162
Q18	8-729-109-41	s	TRANSISTOR 2SK94-X1
R18	1-216-654-11	s	METAL, CHIP 1.3K 0.5% 1/10W

FRAME

Ref. No. or Q'ty	Part No.	SP	Description
	1-542-112-11	s	MICROPHONE (C-2025)
	1-547-463-11	o	FILTER UNIT, OPTICAL
	1-574-145-11	s	WIRE, FLAT TYPE (30 CORE)
	1-590-168-11	s	WIRE, FLAT TYPE (16 CORE)
	1-942-381-12	s	HARNESS (LENS)
	1-946-627-11	o	HARNESS (RM)
	8-814-189-31	s	MICROPHONE, BUILT-IN (C-1007D)
CN101	1-562-782-21	s	RECEPTACLE, 10P FEMALE "REMOTE"
	1-569-202-11	o	HOUSING, CONNECTOR 9P
	1-569-193-11	s	CONTACT
	1-569-191-11	o	TERMINAL, SOLDERLESS
CN102	1-561-320-00	s	SOCKET, DIN 8P "VF"
CN104	1-562-222-41	s	CONNECTOR,6P,FEMALE
	1-562-151-11	o	HOUSING, 6P
	1-569-193-11	s	CONTACT
CN105	1-561-781-11	s	CONNECTOR, BNC, FEMALE
S102	1-553-972-00	s	TOGGLE "POWER"

COLOR VIDEO CAMERA



SPECIFICATIONS

Camera head (DXC-327/327P)

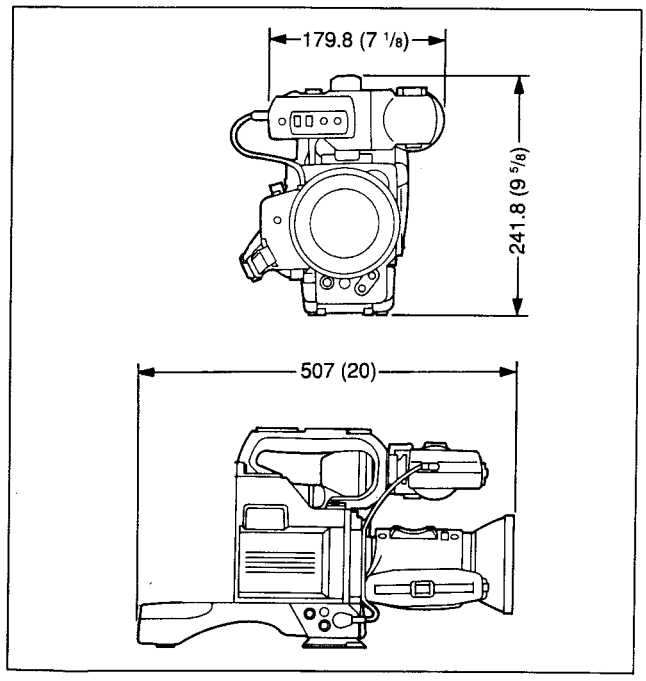
Image device	Interline-transfer CCD, 3-chip
Picture elements	
	768 × 494 (h/v) (NTSC)
	752 × 582 (h/v) (PAL)
Sensing area	6.4 mm × 4.8 mm (equivalent to a 1/2-inch pickup tube)
Built-in filters	1: 3200 K
	2: 5600 K + 1/8 ND
	3: 5600 K
Lens mount	Bayonet mount
Signal system	EIA standards, NTSC color system (for DXC-327)
	CCIR standards, PAL color system (for DXC-327P)
Scanning system	
	525 lines, 2:1 interlace, 30 frames/sec. (NTSC)
	625 lines, 2:1 interlace, 25 frames/sec. (PAL)
Scanning frequency	
	Horizontal: 15.734 kHz (NTSC)
	15.625 kHz (PAL)
	Vertical: 59.94 Hz (NTSC)
	50.00 Hz (PAL)
Sync system	Internal
	External with the BS or VBS signal supplied to the GEN LOCK IN connector (When the CA-327/327P, CA-325/325P, CA-325A/325AP or CA-325B is used) or the reference signal input to the VTR/CCU/CMA connector from the GEN LOCK IN connector of the CCU-M3/M3P (When the CA-327/327P or CA-325/325 is used)
Horizontal resolution	
	700 lines (center)
Minimum illumination	
	20 lux with F1.4, + 18 dB
Sensitivity	2000 lux with F5.0, at 3200 K
Gain selection	0 dB, 9 dB or 18 dB, selectable
Video output	Composite signal:
	1.0 Vp-p, sync negative,
	75 Ω unbalanced
	Y/C separate signal:
	Y: 1.0 Vp-p, sync negative, unbalanced
	C: burst level 0.286 Vp-p (NTSC)
	0.3 Vp-p (PAL)
	without sync
Signal to noise ratio	
	60 dB (NTSC)
	58 dB (PAL)
Registration	0.05 % for Zone I
	0.05 % for Zone II
	0.05 % for Zone III

SONY®

SERVICE MANUAL

Inputs/Outputs	VIDEO OUT: BNC-type LENS: 1/2-inch lens connector (7-pin) 2/3-inch lens connector (6-pin) VF: 8-pin REMOTE: 10-pin
Power requirements	12 V DC
Power consumption	8 W
Operating temperature	–5°C to +45°C (23°F to 113°F)
Storage temperature	–20°C to +60°C (–4°F to 140°F)
Weight	2 kg (4 lb 7 oz)
Dimensions	See the illustrations below. Unit: mm (inches)

Dimensions



Carrying case (LC-420)

Weight	About 7.7 kg (15 lb 7 oz)
Dimensions	About 790 × 440 × 340 mm (w/h/d) (31 1/8 × 17 3/8 × 13 1/2 inches)

Accessories supplied

CCQ-2BRS camera cable (with Q-type 14-pin connectors) (supplied with the DXC-327K/327PK/327L/327PL only) (1)
VCL-712BX zoom lens (supplied with the DXC-327K/327PK only) (1)
DXF-327/327CE electronic viewfinder (supplied with the DXC-327K/327PK/327L/327PL only) (1)
LC-420 carrying case (supplied with the DXC-327K/327PK/327L/327PL only) (1)
VCT-12 tripod attachment (supplied with the DXC-327K/327PK/327L/327PL only) (1)
Lens cap (1)
Chart for flange focal length adjustment (1)

Design and specifications are subject to change without notice.

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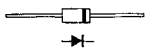
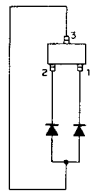
DIODE, TRANSISTOR



1S1585

(SCALE 4/1)
TOP VIEW



1S2836

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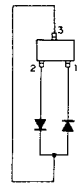
TOP VIEW



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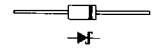

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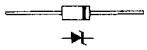
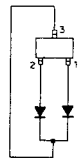


HZ ?BLL

(SCALE 4/1)
TOP VIEW

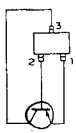


MA152WK

(SCALE 4/1)
TOP VIEW

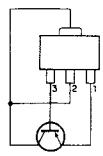
RD ? ?M-B ?

(SCALE 4/1)
TOP VIEW



2SA1162
2SA1226
2SA1462

(SCALE 4/1)
TOP VIEW



2SB798

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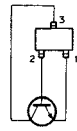
TOP VIEW



2SC1623
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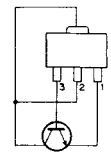
2SC3735

TOP VIEW (SCALE 4/1)



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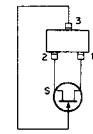
TOP VIEW (SCALE 4/1)



2SK94

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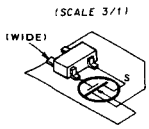
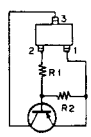


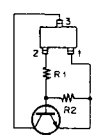
3SK163

TOP VIEW (SCALE 4/1)



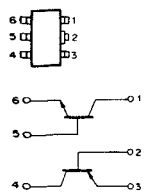
DTA114YK (R1 = 10K, R2 = 47K)

TOP VIEW (SCALE 4/1)



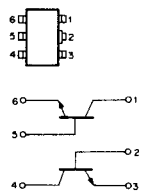
DTC114YK (R1 = 10K, R2 = 47K)

(SCALE 6/1)
TOP VIEW



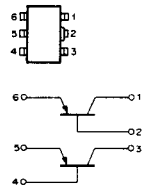
XN4601

(SCALE 6/1)
TOP VIEW



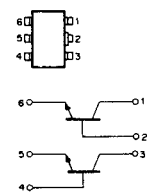
XN4608

(SCALE 6/1)
TOP VIEW



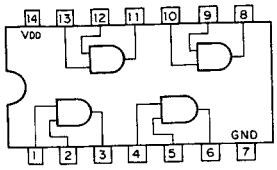
XN6401
XN6435

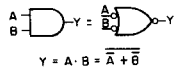
(SCALE 6/1)
TOP VIEW



XN6501
XN6534

74AC08SJ (NS) FLAT PACKAGE
SN74HC08NS (TI) FLAT PACKAGE
C-MOS QUAD 2-INPUT AND GATE
– TOP VIEW –





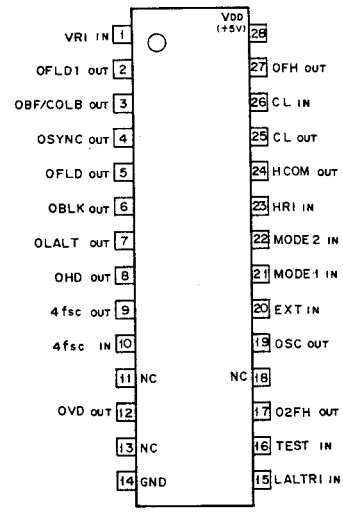
A	B	Y
0	0	0
0	1	0
1	0	0
1	1	1

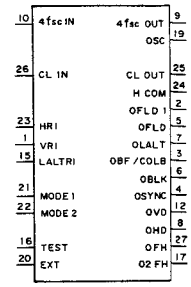
0 ; LOW LEVEL
1 ; HIGH LEVEL

NOTE :

TYPE	Vdd
TC74AC08F	+2 to +5.5V
OTHER TYPES	+2 to +6V

CXD1217M (SONY) FLAT PACKAGE
C-MOS SYNC GENERATOR
– TOP VIEW –



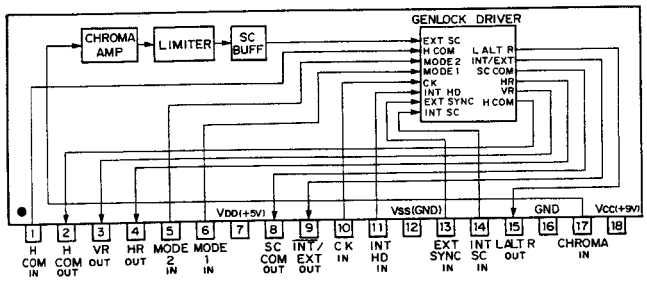


SYSTEM	4fsc	CLOCK
NTSC	910fH	910fH
PAL	1135fH+2fV	908fH
PALM	909fH	910fH
SECAM	—	908fH

INPUT		SYSTEM
MODE1	MODE2	
0	0	NTSC
0	1	SECAM
1	0	PALM
1	1	PAL

0 ; LOW LEVEL
1 ; HIGH LEVEL

BX1340 (SONY)
SC LIMITER AND GENLOCK DRIVER
– REAR VIEW –

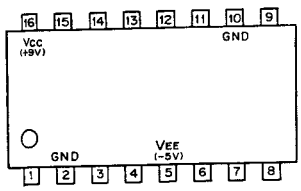


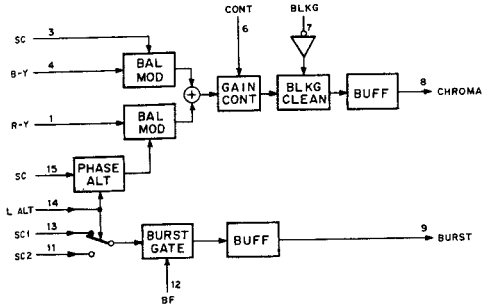
MODE SELECTION

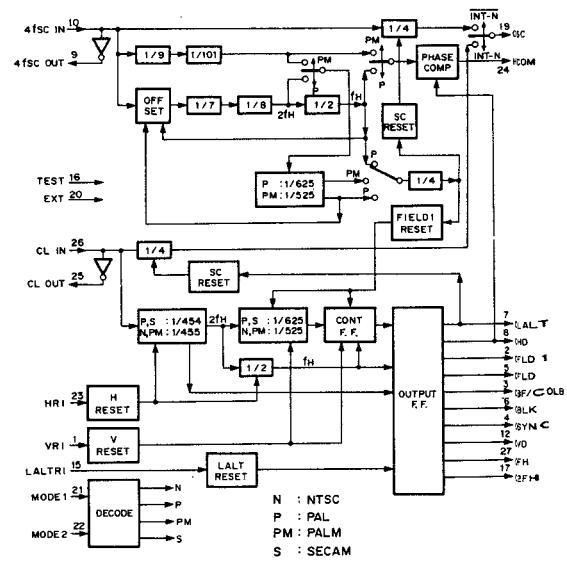
MODE 1	MODE 2	MODE
1	1	NTSC
0	0	PAL

0; LOW LEVEL
1; HIGH LEVEL

CX22017 (SONY)
VIDEO SIGNAL PROCESSOR
– TOP VIEW –



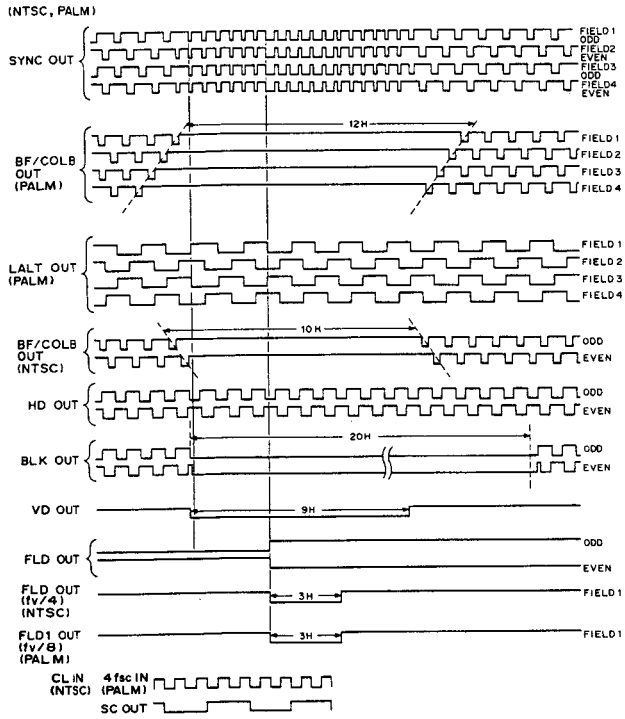


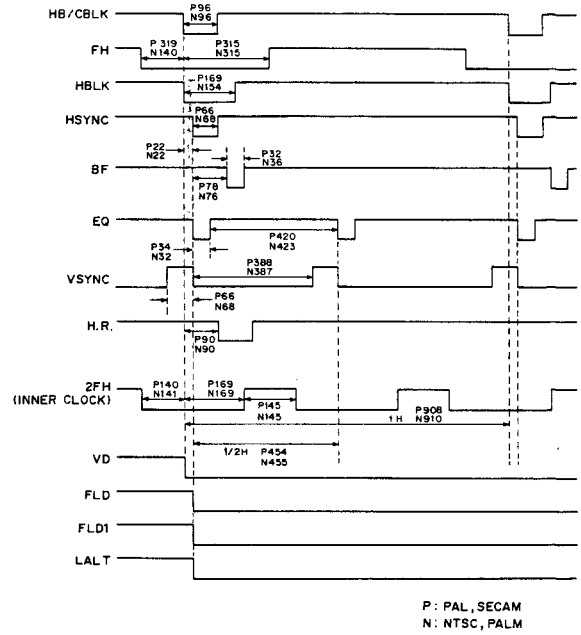


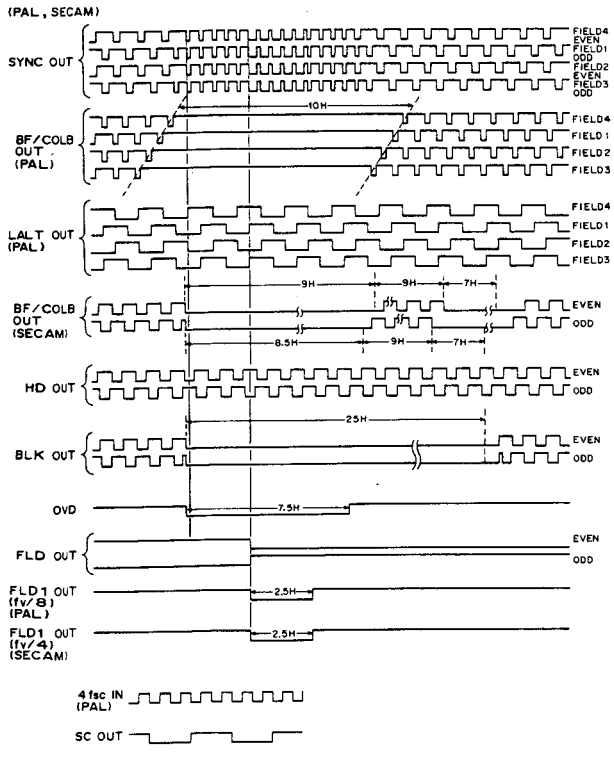
N : NTSC
P : PAL
PM : PALM
S : SECAM

INPUT
4fSC IN ; 4fSC INPUT
CL IN ; CLOCK INPUT
EXT ; SYNC MODE SELECT
(L ; INTERNAL, H ; EXTERNAL)
HRI ; H RESET
LALTRI ; LINE CHANGE RESET
MODE 1,2 ; SYSTEM SELECT
VRI ; V RESET

OUT PUT
4fSC OUT ; 4fSC OUTPUT
CL OUT ; CLOCK OUTPUT
HCOM ; PHASE COMPARATOR
02fH ; 2fH OUTPUT
OBF/COLB ; BURST FLAG/COLOR BLANKING
OBLK ; COMPOSITE BLANKING
OFH ; H FREQUENCE
OFLD ; EVEN, ODD
OFLD1 ; FIELD1
OHD ; H DRIVE
OLALT ; LINE CHANGE
OSC ; SUBCARRIER
OSYNC ; COMPOSITE SYNC
OVD ; V DRIVE



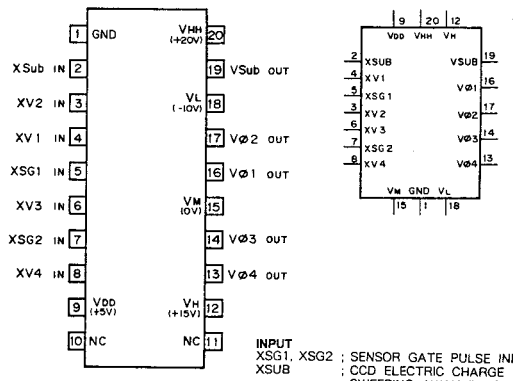




CXD1250M (SONY) FLAT PACKAGE

C-MOS VERTICAL CLOCK DRIVER FOR CCD

– TOP VIEW –



INPUT

XSG1, XSG2 ; SENSOR GATE PULSE INPUT

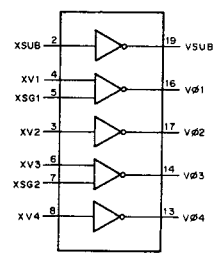
XSUB ; CCD ELECTRIC CHARGE SWEEPING AWAY PULSE INPUT

XV1-XV4 ; VERTICAL REGISTER TRANSMISSION CLOCK INPUT

OUTPUT

VSUB ; CCD ELECTRIC CHARGE SWEEPING AWAY PULSE OUTPUT

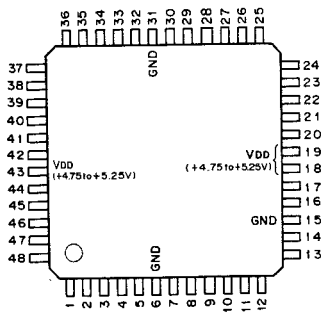
V ϕ 1-V ϕ 4 ; VERTICAL REGISTER TRANSMISSION CLOCK OUTPUT



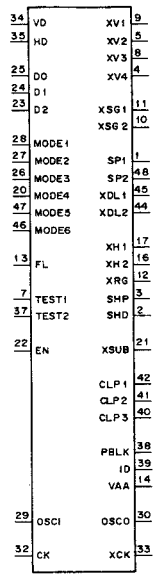
CXD1255Q (SONY) FLAT PACKAGE

C-MOS SCANNING SYSTEM TIMING SIGNAL GENERATOR FOR CCD CAMERA

– TOP VIEW –



PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	O	SP1	13	I	FL	25	I	D0	37	I	TEST2
2	O	SHD	14	O	VAA	26	I	MODE3	38	O	PBLK
3	O	SHP	15	–	GND	27	I	MODE2	39	O	ID
4	O	XV4	16	O	XH2	28	I	MODE1	40	O	CLP3
5	O	XV2	17	O	XH1	29	I	OSCI	41	O	CLP2
6	–	GND	18	–	VDD	30	O	OSCO	42	O	CLP1
7	I	TEST1	19	–	VDD	31	–	GND	43	–	VDD
8	O	XV3	20	I	MODE4	32	I	CK	44	O	XDL2
9	O	XV1	21	O	XSUB	33	O	XCK	45	O	XDL1
10	O	XSG2	22	I	EN	34	I	VD	46	I	MODE6
11	O	XSG1	23	I	D2	35	I	HD	47	I	MODE5
12	O	XRG	24	I	D1	36	O	CL	48	O	SP2

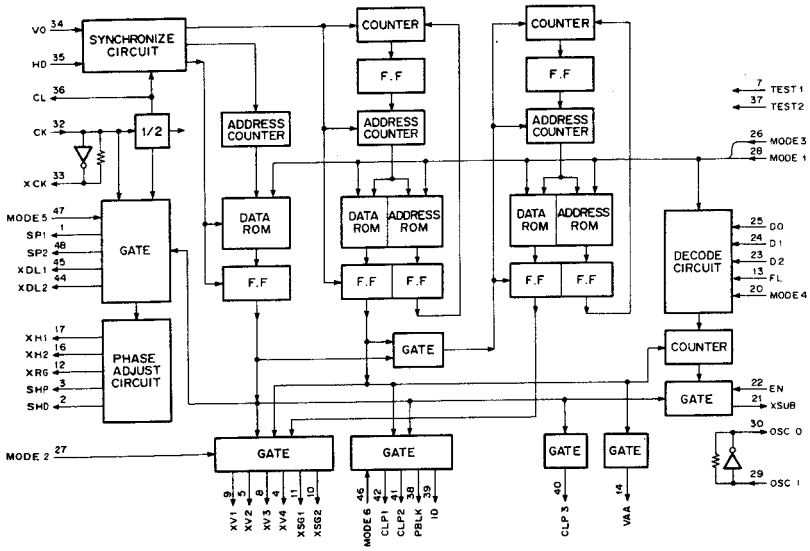


INPUT

CK	; INVERTER INPUT FOR DUTY CONTROL (MAIN CLOCK)
D0 – D2	; ELECTRONIC SHUTTER SPEED CHANGE
EN	; ELECTRONIC SHUTTER ON/OFF (0 ; OFF 1 ; ON)
FL	; ELECTRONIC SHUTTER FLICKER LESS
HD	; HORIZONTAL DRIVE PULSE
MODE1	; COLOR/MONOCHROME (B/W) CHANGE (0 ; COLOR 1 ; B/W)
MODE2	; FIELD/FRAME STORAGE CHANGE (0 ; FIELD 1 ; FRAME)
MODE3	; NTSC/PAL CHANGE (0 ; NTSC 1 ; PAL)
MODE4	; ELECTRONIC SHUTTER SPEED INPUT SELECT (0 ; SELIAL IN 1 ; PARALLEL IN)
MODE5	; COLOR/MONOCHROME (B/W) CHANGE (0 ; COLOR 1 ; B/W)
MODE6	; PBLK CONTROL PULSE (0 ; NARROW 1 ; WIDE)
OSCI	; INVERTER INPUT FOR OSCILLATOR
TEST1	; OPEN
TEST2	; GND
VD	; VERTICAL DRIVE SIGNAL

OUTPUT

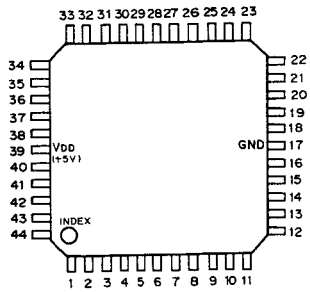
CL	; CLOCK OUTPUT FOR SYNC GENERATOR
CLP1 – CLP3	; CLAMP PULSE
ID	; LINE DISCRIMINATE PULSE
OSCO	; INVERTER OUTPUT FOR OSCILLATOR
PBLK	; PRE-BLANKING PULSE
SHD	; CCD DATA OUTPUT S/H PULSE
SHP	; CCD PRE CHARGE LEVEL S/H PULSE
SP1,SP2	; COLOR SEPARATE S/H PULSE
VAA	; VERTICAL BLANKING CLEANING PULSE
XCK	; INVERTER OUTPUT FOR DUTY CONTROL
XDL1 – XDL3	; CLOCK PULSE FOR DELAY LINE
XH1,XH2	; H REGISTER CLOCK PULSE
XRG	; CCD OUTPUT RESET PULSE
XSUB	; ELECTRIC CHARGE SWEEPING AWAY PULSE
XSG1,XSG2	; SENSOR ELECTRIC CHARGE READ OUT PULSE
XV1 – XV4	; V REGISTER CLOCK PULSE

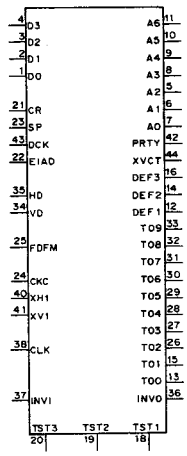


CXD8095Q (SONY) FLAT PACKAGE

C-MOS GATE ARRAY

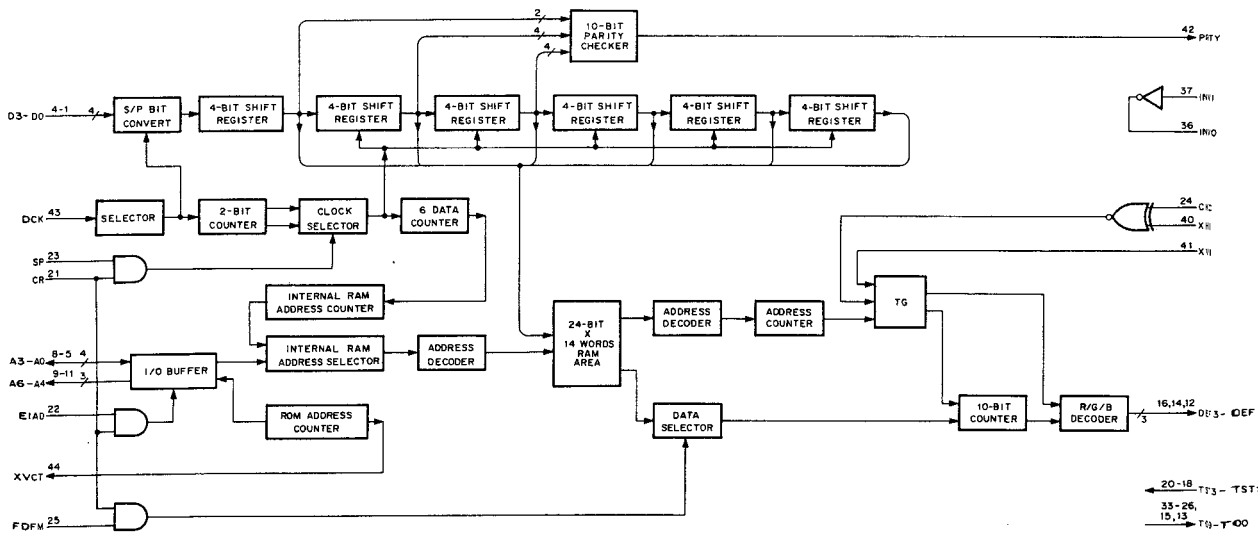
– TOP VIEW –

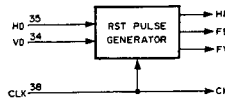




(VDD = + 5V)

PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL
1	I	D0	12	O	DEF1	23	I	SP	34	I	VD
2	I	D1	13	O	T00	24	I	CKC	35	I	HD
3	I	D2	14	O	DEF2	25	I	FDFM	36	O	INVO
4	I	D3	15	O	T01	26	O	T02	37	I	INVI
5	I/O	A2	16	O	DEF3	27	O	T03	38	I	CLK
6	I/O	A1	17	–	GND	28	O	T04	39	–	VDD
7	I/O	A0	18	I	TST1	29	O	T05	40	I	XH1
8	I/O	A3	19	I	TST2	30	O	T06	41	I	XV1
9	O	A4	20	I	TST3	31	O	T07	42	O	PRTY
10	O	A5	21	I	CR	32	O	T08	43	I	DCK
11	O	A6	22	I	EIAD	33	O	T09	44	O	XVCT





INPUT

CKC	; XH1 ACTIVE EDGE DECISION
CLK	; SYSTEM CLOCK
CR	; DEFECT COMPENSATION DATA SELECT (H ; u-COM MODE, L ; NORMAL MODE)
D0 – D3	; 4-BIT PARALLEL DATA
DCLK	; DATA INPUTS STROVE PULSE
EIAD	; H ; EXT ADDRESS, L ; INT ADDRESS
FDFM	; FRAME READ/FIELD READ SWITCH (H ; FIELD READ)
HD	; HORIZONTAL DRIVE
INVI	; INVERTER
SP	; INPUT DATA SERIAL/PARALLEL SWITCH (H ; SERIAL)
TST1 – TST3	; TEST MODE SELECT
VD	; VERTICAL DRIVE
XH1	; CLOCK FOR DEFECT CORRECTION
XV1	; LINE COUNTER INPUT TERMINAL

OUTPUT

A4 – A6	; DATA ADDRESS
DEF1 – DEF3	; DEFECT COMPENSATION GATE PULSE (R, G, B-CH)
INVO	; INVERTER
PRTY	; 12-BIT DATA PARITY CHECK (H ; EVEN)
T00 – T09	; TEST TERMINAL FOR INTERNAL DATA OUTPUTS
XVCT	; ROM POWER VOLTAGE CONTROL TERMINAL

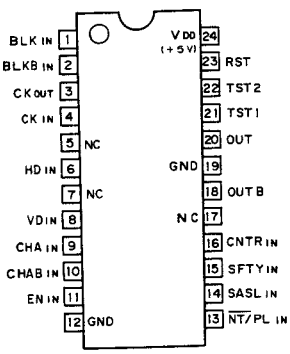
INPUT/OUTPUT

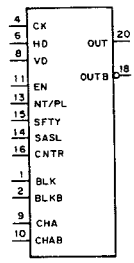
A0 – A3	; DATA ADDRESS OUTPUTS (DATA ADDRESS INPUTS ; u-COM MODE)

CXD8154M (SONY)

C-MOS GATE ARRAY

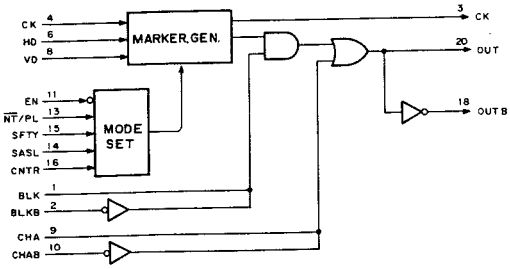
– TOP VIEW –





INPUT
BLK ; BLKG IN
BLKB ; BLKG IN
CHA ; CHR IN
CHAB ; CHR IN
CK ; CLOCK IN
CNTR ; CENTER ON/OFF
EN ; ENABLE IN
HD ; HORIZONTAL DRIVE IN
NT/PL ; NTSC/PAL
RST ; RESET
SASL ; SAFETY 60/90
SFTY ; SAFETY ON/OFF
VD ; VERTICAL DRIVE IN
TST1 ; TEST 1
TST2 ; TEST 2

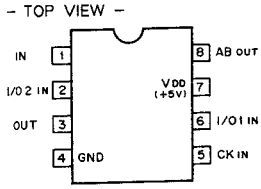
OUTPUT
OUT ; OUTPUT
OUTB ; OUTPUT
CKO ; CLOCK OUT

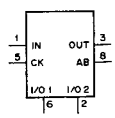


CXL5504M (SONY)

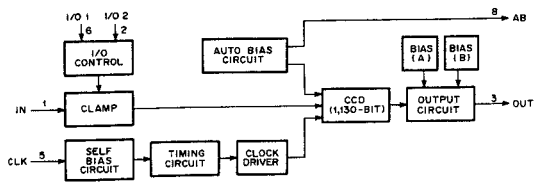
C-MOS CCD 1H DELAY LINE

– TOP VIEW –





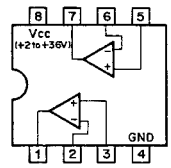
AB ; AUTO BIAS DC OUTPUT
CK ; CLOCK INPUT
IN ; SIGNAL INPUT
I/O1, I/O2 ; I/O CONTROL 1,2 INPUTS
OUT ; SIGNAL OUTPUT



LM2903M (RAYTHEON) FLAT PACKAGE

DUAL VOLTAGE COMPARATORS

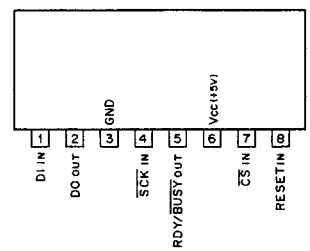
– TOP VIEW –

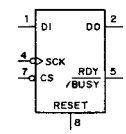


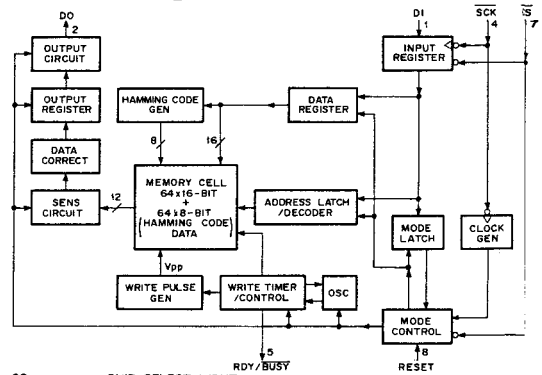
M6M80011L (MITSUBISHI)

1k (64x16)-BIT ERASABLE PROM

– SIDE VIEW –



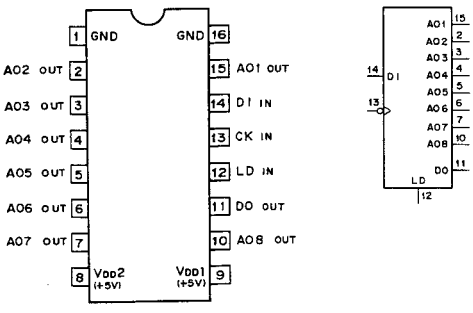




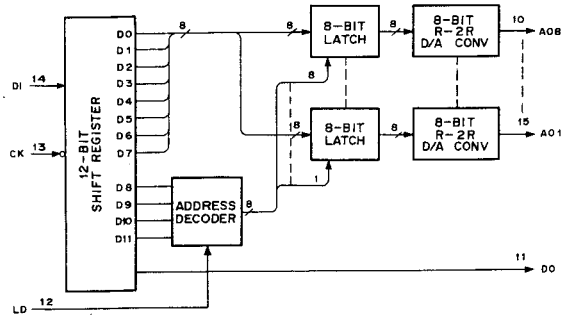
CS ; CHIP SELECT INPUT
DI ; DATA INPUT
DO ; DATA OUTPUT
RDY/BUSY ; BUSY OUTPUT
RESET ; RESET INPUT
SCK ; CLOCK INPUT

MB88342PF (FUJITSU) FLAT PACKAGE

C-MOS 8-BIT D/A CONVERTER
- TOP VIEW -

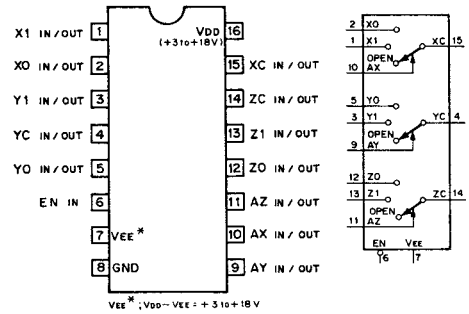


A01 – A08 : 8-BIT D/A OUTPUTS
CK : CLOCK INPUT
DI : SERIAL DATA INPUT
DO : DATA OUTPUT
LD : DATA LOAD CONTROL INPUT (H : LOAD)



MC14053BF (MOTOROLA) FLAT PACKAGE

C-MOS TRIPLE 2-CHANNEL ANALOG MULTIPLEXER/DEMULTIPLEXER
- TOP VIEW -



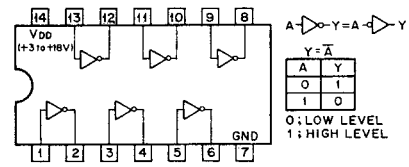
VEE* ; VDD – VEE = +3 to +18 V

CONT. INPUTS		ON
EN	A (X,Y,Z,)	CHANNEL
0	0	0
0	1	1
1	X	OPEN

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE.

MC14069UBF (MOTOROLA)
TC4069UBF (TOSHIBA) FLAT PACKAGE

C-MOS INVERTER
- TOP VIEW -



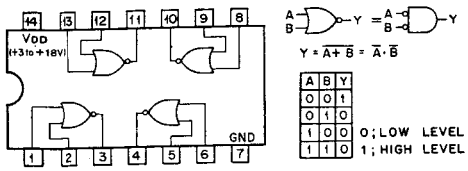
$Y = \overline{A}$

A	Y
0	1
1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL

MC14001BF (MOTOROLA) FLAT PACKAGE

C-MOS 2-INPUT NOR GATE
- TOP VIEW -



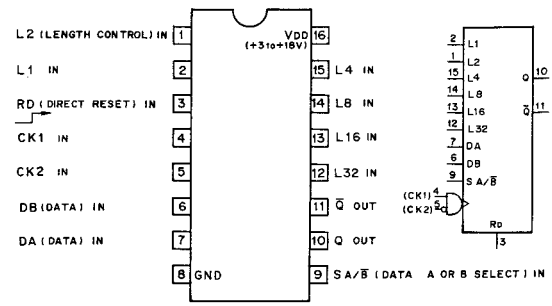
$Y = \overline{A+B} = \overline{A} \cdot \overline{B}$

A	B	Y
0	0	1
0	1	0
1	0	0
1	1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL

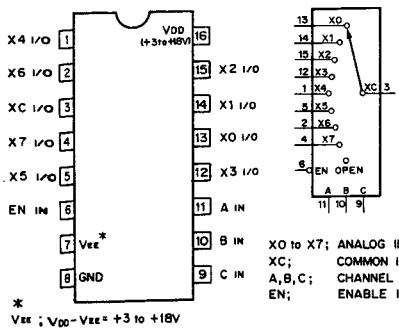
MC14557BF (MOTOROLA) FLAT PACKAGE

C-MOS 1-TO-64-BIT VARIABLE LENGTH SHIFT REGISTER
- TOP VIEW -



MC14051BF (MOTOROLA) FLAT PACKAGE

C-MOS 8-CHANNEL ANALOG MULTIPLEXER/DEMULTIPLEXER
- TOP VIEW -



* VEE ; VDD – VEE = +3 to +18V

CONTROL INPUTS				SELECTED CHANNEL
EN	SELECT C	B	A	
0	0	0	0	X0
0	0	0	1	X1
0	0	1	0	X2
0	0	1	1	X3
0	1	0	0	X4
0	1	0	1	X5
0	1	1	0	X6
0	1	1	1	X7
1	X	X	X	OPEN

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

XO to X7; ANALOG INPUTS/OUTPUTS
XC; COMMON INPUT/OUTPUT
A,B,C; CHANNEL SELECT INPUT
EN; ENABLE INPUT

LENGTH SELECT TRUTH TABLE

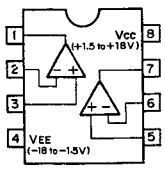
L32	L16	L8	L4	L2	L1	REGISTER LENGTH
0	0	0	0	0	0	1 - BIT
0	0	0	0	0	1	2 - BIT
0	0	0	0	1	0	3 - BIT
0	0	0	0	1	1	4 - BIT
0	0	0	1	0	0	5 - BIT
1	1	1	1	0	0	61 - BIT
1	1	1	1	0	1	62 - BIT
1	1	1	1	1	0	63 - BIT
1	1	1	1	1	1	64 - BIT

INPUTS					OUTPUT
RD	SA/B	CK1	CK2		Q
0	0	↓	0		DB
0	1	↓	0		DA
0	0	1	↓		DB
0	1	1	↓		DA
1	X	X	X		0

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

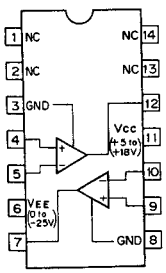
NJM062M (JRC) FLAT PACKAGE
TL062CPS (TI) FLAT PACKAGE

OPERATIONAL AMPLIFIER
(JFET INPUT)
– TOP VIEW –



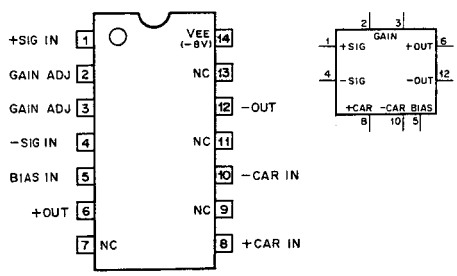
NJM319M (JRC) FLAT PACKAGE

DUAL VOLTAGE COMPARATOR
– TOP VIEW –



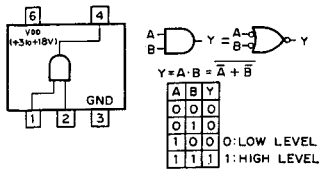
RC1496M (RAYTHEON) FLAT PACKAGE

BALANCED MODULATOR/DEMODULATOR
– TOP VIEW –



SC14S81F (MOTOROLA) FLAT PACKAGE
TC4S81F (TOSHIBA) FLAT PACKAGE

C-MOS 2-INPUT AND GATE
– TOP VIEW –

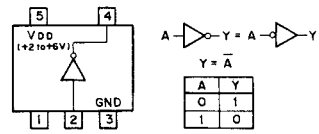


A	B	Y
0	0	0
0	1	0
1	0	0
1	1	1

0: LOW LEVEL
1: HIGH LEVEL

SC7SU04F (MOTOROLA) FLAT PACKAGE

C-MOS INVERTER
– TOP VIEW –

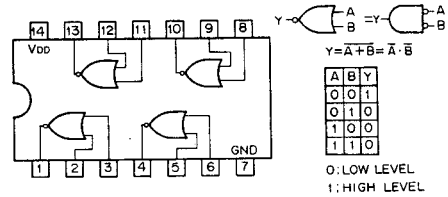


A	Y
0	1
1	0

0; LOW LEVEL
1; HIGH LEVEL

SN74HC02NS (TI) FLAT PACKAGE

C-MOS QUAD 2-INPUT NOR GATE
– TOP VIEW –



A	B	Y
0	0	1
0	1	0
1	0	0
1	1	0

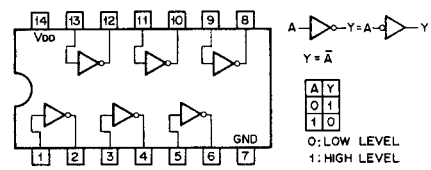
0: LOW LEVEL
1: HIGH LEVEL

NOTE :

TYPE	VDD
TC74AC02F	+2 to +5.5V
OTHER TYPES	+2 to +6V

SN74HC04NS (TI) FLAT PACKAGE
TC74AC04F (TOSHIBA) FLAT PACKAGE

C-MOS HEX INVERTER
– TOP VIEW –



A	Y
0	1
1	0

0: LOW LEVEL
1: HIGH LEVEL

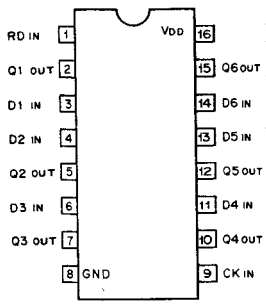
NOTE :

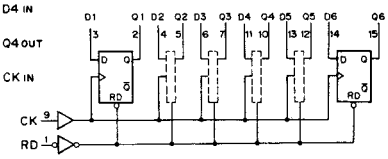
TYPE	VDD
74ACT04 TYPES 74HCT04 TYPES	+5V
TC74AC04F	+2 to +5.5V
TC74ACT04F	+4.5 to +5.5V
OTHER TYPES	+2 to +6V

SN74HC174NS (TI) FLAT PACKAGE

C-MOS D-TYPE FLIP-FLOP WITH RESET

– TOP VIEW –





EACH FLIP-FLOP

INPUT			OUT
RD	CK	D	Q
0	X	X	0
1	↓	0	0
1	↓	1	1
1	0	X	Q0

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

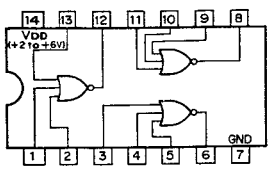
NOTE :

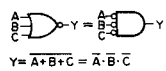
TYPE	VDD
74AC	+3.3 to +5V
74ACT	+5V
74HC	+2 to +6V
TC74AC174F	+2 to +5.5V

SN74HC27NS (TI) FLAT PACKAGE

C-MOS 3-LINE POSITIVE-NOR GATE

– TOP VIEW –





$Y = \overline{A+B+C} = \overline{A} \cdot \overline{B} \cdot \overline{C}$

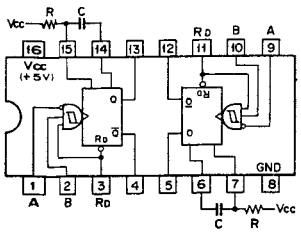
A	B	C	Y
0	0	0	1
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	0
1	1	1	0

0; LOW LEVEL
1; HIGH LEVEL

SN74LS221NS (TI) FLAT PACKAGE

TTL MONOSTABLE MULTIVIBRATOR WITH SCHMITT TRIGGER INPUT

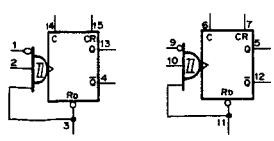
– TOP VIEW –



INPUTS			OUTPUTS	
RD	A	B	Q	$\overline{Q}$
0	X	X	0	1
X	1	X	0	1
X	X	0	0	1
1	0	↑	⊓	⊔
1	↓	1	⊓	⊔
↑	0	1	⊓	⊔

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

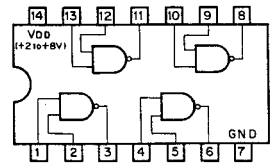
OUTPUT PULSE WIDTH = 0.7CR

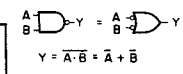


TC40H000F (TOSHIBA) FLAT PACKAGE

C-MOS 2-INPUT NAND GATE

– TOP VIEW –





$Y = \overline{A \cdot B} = \overline{A} + \overline{B}$

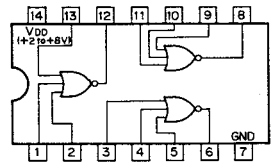
A	B	Y
0	0	1
0	1	1
1	0	1
1	1	0

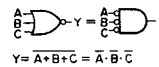
0; LOW LEVEL
1; HIGH LEVEL

TC40H027F (TOSHIBA) FLAT PACKAGE

C-MOS 3-INPUT POSITIVE-NOR GATE

– TOP VIEW –





$Y = \overline{A+B+C} = \overline{A} \cdot \overline{B} \cdot \overline{C}$

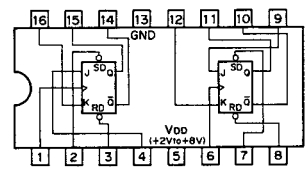
A	B	C	Y
0	0	0	1
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	0
1	1	1	0

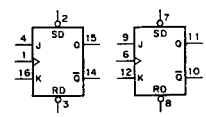
0; LOW LEVEL
1; HIGH LEVEL

TC40H076AF (TOSHIBA) FLAT PACKAGE

C-MOS HIGH SPEED EDGE TRIGGER TYPE J-K FLIP-FLOP WITH DIRECT SET/RESET

– TOP VIEW –





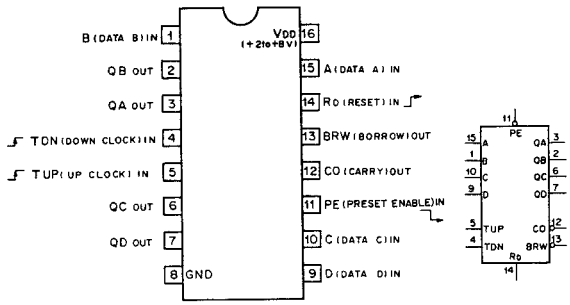
INPUTS					OUTPUTS	
RD	SD	CK	J	K	Q	$\overline{Q}$
1	0	X	X	X	1	0
0	1	X	X	X	0	1
0	0	X	X	X	1	1
1	1	↓	0	0	NO CHANGE	
1	1	↓	1	0	1	0
1	1	↓	0	1	0	1
1	1	↓	1	1	TOGGLE	
1	1	↓	X	X	NO CHANGE	

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

TC40H193F (TOSHIBA) FLAT PACKAGE

C-MOS PRESETTABLE SYNCHRONOUS 4-BIT UP/DOWN COUNTER

– TOP VIEW –

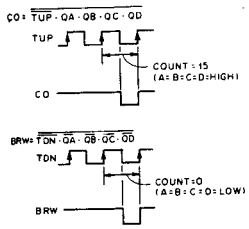


CONTROL INPUTS				MODE
RD	PE	TUP	TDN	
1	X	X	X	RESET TO ZERO
0	0	X	X	PRESET
0	1	↑	1	UP COUNT
0	1	1	↑	DOWN COUNT
0	1	1	1	NO COUNT

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE.

COUNT	OUTPUTS			
	QD	QC	QB	QA
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
10	1	0	1	0
11	1	0	1	1
12	1	1	0	0
13	1	1	0	1
14	1	1	1	0
15	1	1	1	1

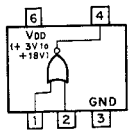
UP COUNT
DOWN COUNT

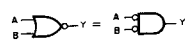


TC4S01F (TOSHIBA) FLAT PACKAGE

C-MOS 2-INPUT NOR GATE

– TOP VIEW –





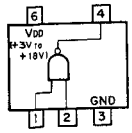
A	B	Y
0	0	1
0	1	0
1	0	0
1	1	0

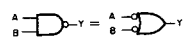
0 ; LOW LEVEL
1 ; HIGH LEVEL

TC4S11F (TOSHIBA) FLAT PACKAGE

C-MOS 2-INPUT NAND GATE

– TOP VIEW –





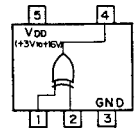
A	B	Y
0	0	1
0	1	1
1	0	1
1	1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL

TC4S30F (TOSHIBA) FLAT PACKAGE

C-MOS EXCLUSIVE OR GATE

– TOP VIEW –



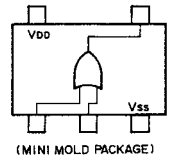
A	B	Y
0	0	0
0	1	1
1	0	1
1	1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL

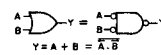
TC4S71F (TOSHIBA) FLAT PACKAGE

C-MOS 2-INPUT OR GATE

– TOP VIEW –



(MINI MOLD PACKAGE)



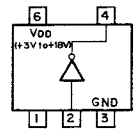
A	B	Y
0	0	0
0	1	1
1	0	1
1	1	1

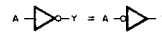
0 ; LOW LEVEL
1 ; HIGH LEVEL

TC4SU69F (TOSHIBA) FLAT PACKAGE

C-MOS INVERTER BUFFER

– TOP VIEW –





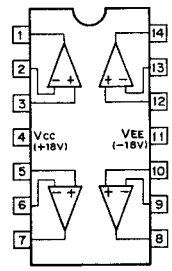
A	Y
0	1
1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL

TL064CNS (TI) FLAT PACKAGE

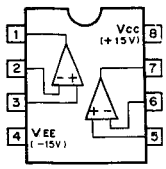
OPERATIONAL AMPLIFIER
(J FET-INPUT)

– TOP VIEW –



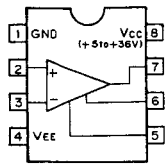
TL082CPS (TI) FLAT PACKAGE

OPERATIONAL AMPLIFIER
(J FET-INPUT)
– TOP VIEW –



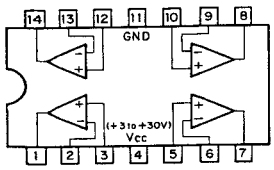
uPC311G2 (NEC) FLAT PACKAGE

VOLTAGE COMPARATOR
– TOP VIEW –



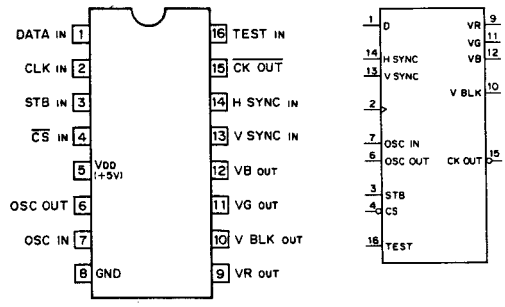
uPC324G2 (NEC) FLAT PACKAGE

QUAD. OP AMPLIFIER
– TOP VIEW –

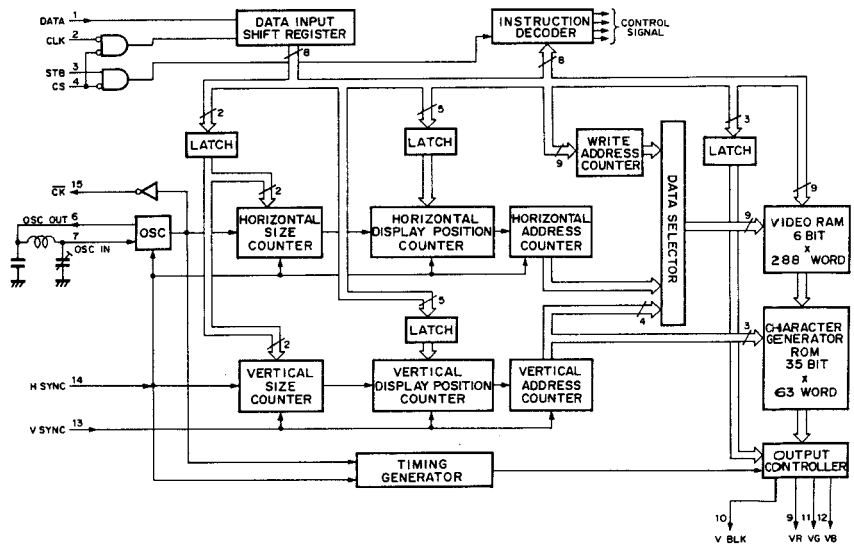


uPD6142G-101 (NEC) FLAT PACKAGE

C-MOS 8-BIT SERIALL INPUT CHARACTER DISPLAY
– TOP VIEW –



D; DATA INPUT
CK OUT; EQUAL TO OUTPUT OF OSC OUT
CLK; CLOCK INPUT
CS; CHIP SELECT INPUT
H SYNC; H SYNC INPUT
OSC IN, OUT; EXTERNAL TERMINAL FOR OSC
STB; STROBE INPUT
TEST; TEST CLOCK INPUT
VB; BLUE CHARACTER DATA OUTPUT
V BLK; V BLANKING OUTPUT
VG; GREEN CHARACTER DATA OUTPUT
VR; RED CHARACTER DATA OUTPUT
V SYNC; V SYNC INPUT



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